2009

Senator Kate Lundy

[PUBLIC SPHERE 3: ICT & CREATIVE INDUSTRY DEVELOPMENT BRIEFING PAPER]

This Briefing Paper is an overview of the perspectives and discussions from the Public Sphere above. The public consultation, event and reporting of outcomes was facilitated by Senator Kate Lundy as an initiative to encourage more open consultation for public Policy. Input to the briefing paper includes the blog comments, blog posts, and event input including the talks, Twitter feed, live-blogging and other contributions. All details at Senator Lundy's website: http://www.katelundy.com.au/

Public Sphere 3

Topic: ICT & Creative Industry Development

This Public Sphere engages with the ICT and creative industries, as well as the broader community to identify areas where government policy can be developed or enhanced to better facilitate the growth and development of these industries in Australia. The ICT and creative industries have been shown around the world to be a massive contributor to national and global economic and productivity growth. It is extremely important – particularly given the current global climate – that we prioritise support for ICT industry growth and development in Australia.

Discussion on this Public Sphere topic opened on 24th July 2009 via a blog on Senator Lundy's site (http://www.katelundy.com.au/2009/07/24/public-sphere-3-australian-ict-creative-industries-development/). The Public Sphere Camp was held on 28th August 2009 in three simultaneous locations. All proceedings were directed from the Wollongong location, with two remote nodes in Brisbane and Melbourne. There were of course also many other remote participants however we wanted to experiment with scaling by incorporating remote simultaneous events. This draft briefing paper, was opened for public contributions via a Wiki on Senator Lundy's website on 10th September 2009 and closed for finalisation 23rd November 2009. The briefing paper is to be submitted to the Information Technology Innovation Council and the Commonwealth Commercialisation Institute, both initiatives under Minister Kim Carr, Minister for Innovation, Industry, Science and Research.

The report is made up of six parts:

- An open letter from Senator Lundy about this Public Sphere.
- Topic Briefing - the basic perspectives gathered through the Public Sphere are organised into categories, and links available for further reading. General crowd responses are marked in italics at the bottom of each idea
- Recommendations arising from the Public Sphere topics.
- References – links, case studies, photos and other Australian and international references arising from this Public Sphere.
- Event Briefing - information about the event itself, participants and media/blog coverage and recommendations for future improvements to the Public Sphere methodology.
- Copyright information – Additional information about the Creative Commons licence of this document, as referenced on the first page by the Creative Commons icon.

Please note - photos from the day are throughout the report, however please note photos of speakers and the event are not necessarily aligned to the content of the pages they are on. Full acknowledgements of photo origins are under the photo section of the document.

Contents

Open Letter from Senator Lundy

I am very proud to present the third Public Sphere briefing paper, a rich and very useful source of information and policy recommendations around ICT and Creative Industry development in Australia.

This Public Sphere was borne out of the energy and advocacy of the Silicon Beach group: a collective of entrepreneurs, proud of their achievements in ICT and wanting to build Australia's strong reputation in ICT innovation. Silicon Beach is conceptualised as an Aussie version of the legendary economic hub of Silicon Valley. I was inspired by their efforts and wanted to do my part to contribute to the conversation. I thank Elias Bizannes for pulling together the Silicon Beach Lifeguard paper, which aggregated the Silicon Beach community feedback on industry development policy recommendations in Australia.

ICT and creative industries entrepreneurs face a multitude of challenges and this Public Sphere sought to draw these out, discuss, debate and then frame them in the final briefing paper in the form of ideas and recommendations to the Government. The issues traversed early stage and venture capital funding, R&D opportunities and funding, commercialisation, IP management, procurement opportunities, tax treatments in start-ups and strengthening the image of Australian ICT amongst other topics. We also tried to generate specific discussions around three major industry segments – mobile & Web 2.0, creative industries and ICT infrastructure.

I would like to extend a personal thank you to all contributors and supporters of this project. This was the first Public Sphere where we incorporated multiple physical events simultaneously to encourage broader participation and input to the consultation. We had excellent online and in person contribution from all around the country, and the logistics involved were not trivial. I would like to formally thank the following people and groups:

- James Dellow for approaching my office with the excellent idea of having the Public Sphere in Wollongong. This was a wonderful idea to show consultation needs to also happen outside capital cities. It showcased the significant innovation and contributions from rural and regional ICT clusters.
- Pro Vice-Chancellor Joe Chicharo of UoW and all the staff at the University of Wollongong Innovation Centre for their assistance with the Wollongong event.
- Steve Dalton, Des Walsh, Professor Brian Fitzgerald & Paul O'Keefe for volunteering to assist in the running of and promotion of the Brisbane event. Also a big thank you to Terry Caelli and his team at NICTA in Brisbane for the venue, catering, logistics and technical support they provided.
- Donna Benjamin & Christopher Hire for volunteering to assist in the running or and promotion of the Melbourne event. Donna & Chris are both thought leaders their areas of expertise, and they had an exceptional challenge in helping out due to technical issues on the day, and the unfortunate venue change at short notice. I am very thankful for their perseverance in getting great outcomes in spite of the issues! I am also very thankful to all the staff at Trinity College who also worked very hard.
- Finally a huge thank you to my staff, who work tirelessly on many important initiatives like this.

I encourage you to read through all the ideas, recommendations and additional references in this paper, and if you have anything else you would like to add, we encourage you to comment on the Public Sphere 3 category on my website at http://www.katelundy.com.au/category/campaigns/publicsphere/ict-industry-devel/.

My sincere thanks, and I welcome your thoughts and feedback to this and any other Public Spheres we are doing.

Kate

Topic Briefing

This briefing overview is a culmination of the ideas and challenges discussed as part of the Public Sphere topic. It is derived from blog comments and links, Zing input, Twitter discussion, and the speeches presented at the workshop. Some input to the wiki was not discussed on the day, but is marked as such.

Many thanks to all the contributors to this Public Sphere topic, to our Wollongong volunteers, and in particular to our remote note organisers (the Melbourne and Brisbane events). Full thanks are at the end of this document.

Below is a wordle from the content of this document.

http://www.wordle.net/show/wrdl/1373706/Public_Sphere_3%3A_ICT_and_Creative_Industry_development

Topic 1: Funding and Startups

This topic was about funding and starting new ICT and Creative businesses, and ended up also incorporating a healthy discussion about Intellectual Property.

1. Funding

a. Grants

The Commercial Ready project was extremely useful in driving innovation in the ICT/Creative industries in Australia. There needs to be an equivalent initiative put in place. The COMET funding scheme has much less funding available and asks for matching funding and as such is less useful.

The Silicon Beach community identified three problems with most government grant programs:

- The requirement for matching funds. Until a technology startup is producing revenue, or has attracted significant external investment, it will not have spare cash. This is a particular issue in the technology sector, where the low costs of software development and online promotion mean that businesses can be, and usually are, started with low capital investments. This means that most start-ups - regardless of their merit or potential - will simply not have the matching funds available to match a grant, and thus are ineligible.
- Government attitude to the ICT sector. More imagination from funding bodies about what truly small tech companies can offer has been requested. One respondent from Silicon Beach believes his recent experience with the Climate Ready grant scheme and AusIndustry shows that ICT is not a government priority – an AusIndustry Customer Service Manager said that they automatically put applications for software R&D towards the bottom of the pile and discouraged him from applying. This anecdote of a government official engaging in de facto economic planning is disturbing.
- Onerous time requirements to apply. The sheer amount of time and effort required to prepare and follow through with an application for government grants distracts from the actual activities required to run, and grow, the business. This is an especially acute problem in technology start-ups where founders, and early employees will already be extremely busy. The allocation of time to preparing a grant (which may not even be approved) is often not considered effective.

A wonderful quote from the day was "maybe government taxation should be more optimistic and simple, rather than pessimistic and complex".

One discussion group said "Grants are inappropriate for micro startups".

b. Venture Capital

VC investment in Australia was seen by some contributors to be immature on the one hand, with relatively few players compared to other economies and on the other hand, out of touch with new business models and technologies. There was some discussion regarding this perception of VC's being out of touch: was it fuelled by many new ideas being borne out of collaboration on truly open platforms rather than rigidly defined intellectual property ideas (such as patents) upon which a business case is

built? The shift towards a service-delivery and software as a service industry means that many traditional ideas about intellectual property in the ICT sector are simply out of date.

One group said "US VCs leave a lot more on the table for the founders - AU ones want more share and for more control and ask for more revenue to be shown before money is given". This obviously makes it both harder in Australia and desirable to move to the US for ICT startups.

Government and VC dollar for dollar partnerships were suggested as a way to both encourage more VC investment, and to get more bang for buck for government investment. There were several references to the loss of Commerical Ready and how that had become a pre-requisite for the next round of VC funding. It was noted that Climate Ready was in place now, but nothing in ICT.

In the vein of possible government/VC co-investment, the IIF (Innovation Investment Fund) received a boost when on August 6 2009 the Minister announced $64 million will be made available to eleven fund managers to provide follow-on investments to early-stage companies (IIFF - Innovation Investment Follow-on Fund). The press release can be found here: http://minister.innovation.gov.au/Carr/Pages/$64MTOKEEPSMARTSTARTUPSINTHEGAME.aspx . This funding was only available to companies that had been funded previously, so this made sure existing companies would be given a better chance. A similar effort is required for new and up-coming companies in ICT.

c. Angel Funding

Angel funding is often given pre-VC funding and is usually essential for new ideas to be developed from proof of concept to business model. Finding Angel funding in ICT is getting increasingly more difficult as current investment interest is increasingly moving towards biotechnology/clean technology startups.

There is a new angel investors group in Australia: The Australian Association of Angel Investors Limited (AAAI) is the national, not-for-profit peak body for Australian professional Angel Investors: http://www.aaai.net.au/ . The association aims to advocate on behalf of angel investors which will raise the awareness of the critical role they play in very early stage investment.

d. Tax incentives for startups

Tax incentives for startups would both greatly improve the opportunity for startups to succeed, as well as attract both national and international investment in the sector. The first two years are vital for startups and tax incentives that minimise the danger in this initial period would greatly improve success rates. Some specific recommendations are in the recommendations section. The question was asked if most startups fail in the first three years, why should they have to pay full tax?

One suggestion was that the ICT & Creative Industries be treated equally with other industries receiving tax incentives, for instance the film

industry gets tax deductions, however the ICT & other Creative industries have a large multiplier effect on the economy and employment but does not receive such tax benefits.

e. Tax: HECS Funding for Start-Ups

One suggestion from an attendee at the Melbourne node for Australian ICT funding - that received wide support - was a HECS funding scheme. The basis was that entrepreneurs could be funded using existing ATO infrastructure, and repay such funding from wages or earnings - much like university students currently do.

HECS Start-Up Funding would leverage existing fee management infrastructure, provide the relatively small sums needed and potentially share risk. This was felt by a majority of the room to be a new innovative approach. More detail is set out in reference links on this.

f. Reinvestment

Giving the private sector more incentives to invest in the ICT & Creative industries would drive local capacity, innovation and global competitiveness.

A suggestion is in revising Capital Gains Tax. One of the key aspects of the US investment ecosystem is for the ability of investors to reinvest capital proceeds from previous qualifying investments with the consequence of only incurring 50% of the usual capital gains tax liability. Removing any CGT on qualifying reinvested funds will encourage not just investment from previous successes, but also attract other investors to target their money into this sector.

g. Inconsistency

There was seen to be funding inconsistency ("funding starts and stops!") and also a perception that there is large difference in how Government supports other areas, such as sports, which 'get a lot more funding'. These observations are built on perceptions as the overarching federal budget across different sectors is not really comparable, eg: the sport budget is actually quite humble compared to other areas.

h. "Crowd-funding"?

One group came up with the idea of aggregated microloans or "crowd-funding" for startups. Taking the microloan idea (such as http://www.kiva.org/) and applying it to business.

i. Traps in the tax incentives

One of the discussion groups mentioned "traps in the tax breaks" for these industries. No further references were given.

2. ICT & Creative Industry Startups

a. Learning from, but not emulating Silicon Valley

Several people including speakers said that there were lessons to be learned from Silicon Valley, but that there are problems and Australia should learn from the lessons. As one Tweeter wrote: "create our own improved model for an innovative tech community."

b. Taxation of share options

The Silicon Beach paper mentioned the recent issue of government taxation of share options. These are used in lieu of cash incentives or the salaries of more established companies to entice "top tier talent" into startups. The taxing of these share options removes this potential incentive making it more difficult for Australian startups to find and recruit talent.

c. Government support of startups

There isn't seen to be enough support for new companies and one suggestion to resolve this was to have a good checklist for companies.

This sort of service is provided in some states already. It was suggested that the administrative overhead for startups needs to be reduced, however there are several services for this also available. Perhaps there needs to be more education about what is available?

One speaker said and several online participants agreed that there was almost no Government support post the R&D phase, which drives Australian companies overseas to commercialise.

d. Image problem with the industry

During the discussion it was mentioned that there is a perceived lack of success of the industry, yet many companies are doing extremely well are completely unknown. Often Australian technology and companies have to move overseas to succeed, and then get brought back into Australia.

Many of Australia's strongest companies have largely export revenue, as they find it hard to sell into the Australian market, which is highly risk averse. Perhaps there needs to be a way to better showcase Australian successes which might encourage investment and procurement from Australian startups.

As one Tweeter said "promotion and exposure is the key. Like Triplej helps the grass roots music industry + now video too".

e. Market research

One participant spoke of crowdsourcing and resource sharing amongst startups for market research to lower the costs of delivery, and to help startups in creating highly relevant and demand driven products/services.

f. International lessons

It was suggested that we look to Ireland and Israel for examples - this needs more information and references please. Was suggested by Brisbane node of the Public Sphere event. It was also suggested that we look to the US and base our expectations on their ICT market, whereas perhaps we should be looking further afield, and take some lessons from Asia (good location, tax-free corridors, mobile explosion, different culture around social networks, etc).

g. International investment

Google was mentioned many times during the day as an example of how there has been an increase in international ICT companies having development hubs in Australia. There needs to be strong policies in place to encourage international investment in Australia as it has a considerable and positive impact on local skills, capacity, reputation and opportunities/success for startups in this space.

h. Local market limitations

One group mentioned that it was hard to get critical mass on either a regional or national level, and that the international market provided the greatest opportunities. As such the funding and business development support needs to reflect the reality of Australian businesses often needing to service the international market. This of course can be weighed against the "Government Procurement" section, which says if Australian Government and big business bought and invested in more local solutions, the local market opportunities would grow.

i. Company growth

Growing a company from a few people was seen to be quite hard as there is a great impact on cashflow. Perhaps it would be worth looking at the needs of small companies in the early growth phase and how they could be better supported to succeed?

j. Commercialisation vs creativity

One groups asked "why do innovative hubs sometimes fail under pressure of commercialisation? How can models be developed that sustain creativity without diverting into cost recovery?" It is a great

question. Importantly, how can government through policy or legislation help encourage models that sustain creativity while also supporting commercialisation?

k. Applying lessons from other industries to ICT/Creative

Henry Villa spoke on the day about applying LEAN, a methodology used by the manufacturing sector to the ICT/Creative industries. It does raise the question what can we learn from other successful Australian industries. Perhaps the Australian Wine industry may have some lessons as an industry that requires a good reputation and good exports, and has taken Australia from what was not seen as a serious international contender for wines, to being an international leader.

l. Increased support for grassroots initiatives

It is important for Australian governments to have clear guidelines and/or regular funding provided for initiatives that could come from individuals or groups of individuals that want to create different tools and/or technologies that could benefit the bigger community. Current models that in most cases require a large number of documents and/or to be part of an already established organisation represent a hurdle for many common individual that could have great ideas but that don't have the means to satisfy the minimum requirements to receive government support. Initiatives like mashupaustralia.org are a good example of simple models that can open innovation to the common citizen. A clear policy is required in this area.

Australian governments should have a clearer policy to explore and create more programs that target social innovation ideas coming from common citizens that might not be part of a registered organisation.

m. Helping through the initial steps

Australian governments should facilitate the start-up of social innovation ideas involving ICT by providing some of the simplest elements that could help these ideas evolve. Some of these things include free hosting, domains and ongoing technical support. Australian governments should have a centralised place where people involved in the ICT and creative industries could access all these elements that could support their start-ups.

n. ICT and rural development

In order to promote the use of ICT for rural development, it is important that Australian governments facilitate collaboration across ICT and creative industries professionals across sectors. This could be achieved by having clearer government policies around the support for ICT and creative industries related events hosted in regional areas.

The issue of ICT and rural development in Australia seems to be concentrated on how to work through the technical aspects to connect all of Australia. Little thought has been given to people in rural areas are going to make the most of these services. Australian governments should have clear policies to put in place programs that accompany the delivery of the technical resources with strategies for the use of these resources for the benefit of rural communities.

Australian governments should have clear policies that promote the growth of ICT and creative industries related projects in rural communities. These policies could include special benefits for projects that demonstrate a direct impact on rural development.

3. Patents

Meta-Comment: *There are some fairly significant disagreements over patent policy so one contributor tried to make the wiki page reflect a broader range of opinions to be presented.*

Opinions on Patent policy are wide and varied.

There appear to be few arguments against patents on ICT related hardware devices, but there is more disagreement on software patents.

a. Arguments for patents

Arguments promoting and increasing the use of patents with ICT include:

- Patents currently are the only means to protect against competitors getting a springboard advantage.
- Patent protection is cheap and cost effective
    - A provisional patent can be drafted by an ICT to protect novel and inventive concepts for a cost of A$80 (filing fee with IP Australia), followed by, for example, investors or Commonwealth funding for provisional patents, if there is promise and interest in the technology, to fund the patent(s) for potential entry into other jurisdictions.
- Currently Australia as a nation has one patent filed per 100,000 people, whereas other nations such as USA have seven (7) patents per 100,000 people and many other intellectually productive nations have 9 patents per 100,000 people. Consequently, if Australia continues to pursue the path of not protecting it's intellectual property we will end up just paying royalties to other nations. Further, the export of our intellectual property will be solely at our cost, and not our benefit, if we cannot protect it successfully.

Furthermore, proponents of promoting the use of patents argue:

- The benefit of patents needs to be promoted and funded to provide for the development of products and services for the future by Australian ICT and Creative industries.
- In Australia, there is a view that patents are: "useless for building businesses in ICT and yet are often required to get grants or Venture Capital". This view is based on the belief that ICT organisations are not able to be defended their patents, because they will not have sufficient funds to defend and to seek damages against patent infringement. This may be because of:
    - poor knowledge of Australian protection through the availability of litigation funding and insurances and,
    - poor government support in the sense that there is considerable funding for research but no funding for intellectual property protection.
- There needs to be training in the ICT arena as to how seek and manage intellectual property protection in order to inform people of their options if they believe: "if you are big enough to exchange warchests for mutually assured destruction with competitors, then patents are more of a distraction, cost and limitation to innovation"
- This would require a refocus on Intellectual Property as to:
    - where the value lies both locally and internationally,

    - appropriate investment policy; and
    - strategies encouraged to support and fund modern ICT and Creative industries.
- Such a refocus should include the means to help the ICT and Creative industries gain effective intellectual property protection(s). The investment in intellectual property is the mainstay of all the major ICT and Creative industries. Therefore, Australia should foster investment in the Australian ICT and Creative industries from startup to the growth phase.
- In the United Kingdom there is "SABIP (the Strategic Advisory Board for Intellectual Property Policy) is an independent publicly-funded body which is tasked with the role of feeding strategic advice to the British government on all manner of IP issues. These include advice as to the effect of IP enforcement costs on SMEs."http://ipkitten.blogspot.com/2009/09/ip-enforcement-costs-and-smes-can-you.html
    - Currently, in the UK "... the number of patent application enquiries from private individuals and small- and medium-sized enterprises (SMEs) [have] rise significantly over the past 12 months, resulting in the ... filing nearly twice as many applications to the UK Intellectual Property Office (IPO) in the first six months of 2009 compared to in the first six months of 2008.
    - By contrast, ... many big corporations have significantly reduced the number of patents they are filing when compared to a year ago. It has also noticed a drop in the volume of new patent filings from overseas companies. This is reflected by the fact that the overall number of patent applications filed with the IPO fell by approximately five per cent in the first six months of 2009 compared to the same period in 2008."http://www.own-it.org/news/patent-applications-from-start-ups-soaring

b. Concerns about patents

Those who argue against promoting the increased use of software patents say

- There is little evidence to show that software patents provide any kind of protection for businesses seeking to develop their own invention.
- A large proportion of software patents are awarded for improvements which are "obvious to those in the field".
    - It is a slow and costly process to get these patents overturned
    - There are a significant number of instances of companies setup merely to exploit patents that most would argue should never have been given because they were obvious to those in the field.
- Instances of patent legal action between large software companies are comparatively rare. This is usually because large companies have a policy of Mutually Assured Destruction - each company develops it's own "warchest" of patents, knowing that it is very likely they infringe on patents of their competitors but that in the event of legal action they will be able to counter-sue.
    - It is difficult to see how this kind of strategy is helpful to the growth of a productive ICT industry.
- A number of studies show that ICT patents actually act as a disincentive to build businesses." For example, see http://dx.doi.org/10.1126/science.1158624 (SCIENCE: "Promoting Intellectual Discovery: Patents Versus Markets", Meloso, Copic & Bossaerts. Key finding: We found that our "markets system" performed better than the patent system) and "Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk", Bessen & Meurer (Princeton University Press) (http://arstechnica.com/old/content/2008/07/book-review-7-08.ars for a review of that book).
- The US based group "End Software Patents" (http://endsoftpatents.org/) has a comprehensive (if US-centric) report on the state of Software Patents: http://esp.wdfiles.com/local--files/2008-state-of-softpatents/feb_08-summary_report.pdf

Further, opponents of Software Patents call upon the government to:

- Abolish software and business method patents
- Lobby our international partners to do the same

c. References for patents topic

Below are some additional references from the discussions about patents:

- "Peer to patent" opens the patent examination process to public participation. President Obama has showcased it in Open Government Gallery. See http://peertopatent.org/

4. Extra resources for this topic

- Y Combinator: venture firm specialising in Web companies - http://ycombinator.com/
- HECS Proposal: more detail - Tax funding start-ups
- Pollenizer: works with firms around the world to build online and mobile businesses - http://www.pollenizer.com/

Topic 2: Talent

1. Finding talent

a. Rewarding talent

Australia governments should have clear policies that allow the development of strategies to reward talent in the ICT and creative industries. This is better done in creative industries than in the ICT at the moment. Working in developing a good image of the sector is very important as the current image might not be so ideal.

b. Looking in the unusual places

It is important to develop strategies to facilitate the identification of talent in less traditional places. This could be done by opening spaces like contests, conferences and/or other spaces for conversation where anyone could participate and where there are some benefits offered as a result of the participation.

2. Developing skills

a. ICT Education & Skills

One discussions group said there is "currently too much focus on training consumers of technology - rather than creators of technology". This is a basic mindshift that needs to happen at all levels of education.

Several people and the Silicon Beach paper mentioned skills development as an important aspect to ICT & Creative Industry Development. Universities, schools and adult education (eg TAFE) were brought up, and generally the consensus was that students leaving these education institutions are often not equipped with ICT and entrepreneurial skills to contribute to and innovate within Australian companies, ICT, Creative or otherwise.

The lack of basic ICT skills was seen to be an issue in both developing the ICT industry, and in enabling innovations in other industries. Thought leadership and exchange programs as well as practical work experience placements at Universities were mentioned in the Silicon Beach paper as practical ways to overcome this concern and develop skills appropriate for ICT & Creative industry development.

There were several Universities that were seen to be doing quite well, for instance the University of Wollongong had many students going straight into innovative ICT companies in the region, and NICTA often has students from University of New South Wales come straight into research and development projects. For instance, the UoW creates assignments for students which are 'real' projects for a 'real' company that has a 'real' application. One Tweeter mentioned "I can recommend a couple of my courses at Bond University http://bond.edu.au that manage to keep up with Web 2.0 progress".

b. Recruiting international talent

The Silicon Beach paper identified the difficulty for Australian companies to recruit international talent, largely due to the difficulty in securing visas for top computer science graduates from overseas. This also makes it cumbersome for international talent to themselves come to Australia to work or establish startups because their qualifications and experience may or may not count towards a visa.

c. Uninformed mentoring - particularly in regional & remote Australia

One workgroup commented that there were mentors for ICT businesses in regional & remote Australia that do not understand this space.

d. Collaboration with private sector

Education institutions needs to collaborate with and invite the private sector to share knowledge with students to both encourage them into the industry and into entrepreneurship, and to help establish early networks for students with local companies.

A good case study was how the University of Wollongong monitor hiring trends to inform curriculum choices (care of Allison).

3. Industry responsibilities

a. Skills demand

The industry needs to demand relevant and appropriate skills from the education system in order to ensure students are best equipped to ensure the sector, however for the average company they don't have the time for lobbying of this kind. Perhaps a more collaborative and open call from government on a regular basis to ask what skills are needed, could better inform curriculum and training throughout the sector.

b. Industry collaboration

The industry needs to collaborate to mutually learn, share and develop. There are already many industry groups (AIIA, ACS, OSIA, Clusters, etc) so perhaps a way to easily find them is needed?

Topic 3: Government Procurement

1. Culture

a. Driving demand

One discussion group said "the role of Government is not to subsidise failing companies, it is to be sophisticated and discerning buyers that drive innovation. Right now it seems that they are actually stifling change with buying practices".

There is a serious ICT and Creative cultural cringe when it comes to Government procurement in Australia, and the notion of large centralised procurement as being best practise means large cost, large players and large risks. This means many Government agencies do not gain the benefits of the more agile, innovative and often cost-effective small to medium sized local companies.

The government can drive demand, to follow the US governments lead, and become a major buyer of local technology, particularly given the new opportunities presented in the Government 2.0 space and the local expertise available. By reducing departmental hurdles and giving clear incentive to use Australian companies and technologies, this gives young startups the ability to expand in the market. This government investment, on money which already needs to be spent - into a fragile ecosystem that's still growing - would drive local capacity and industries forward to be more globally competitive, and ultimately a greater contributor to the economy through exports.

For example, most startup companies fail at securing deals with enterprise customers - such as government departments - because they don't have the long standing history and guarantee of success (and therefore continued delivery of service). Ironically, it is often the first few customers that can fund further development to grow a business to one that is sustainable. If the government is willing to take more risk on its technology investments, it could bootstrap an entire industry.

The US is a great example of this, as is the Spanish province of Extremadura which was one of the poorest regions until the government heavily invested in ICT infrastructure for schools which bootstrapped the local industry and it ultimately resulted in better prosperity and living standards for the region.

b. IT Gatekeepers

IT gatekeepers within organisations are seen to be potentially large blockers to change and open engagement, particularly in educational institutions as a result. There needs to be better policy and education around balancing management overheads with new innovative ideas.

2. Tendering

a. Tendering processes

There needs to be reform of the tendering system for IT contracts that makes it easier, and encourages small businesses to apply for government work. The problem now is that the tendering system favours big companies and 'proven' solutions.

It was remarked that the government does not support innovation where it is most likely to occur - in individuals and small organisations. What needs to happen is the government needs to 'tender' for good solutions from these groups and award prizes for innovative solutions, as has worked well in the UK and US. An example was given of Australian Parliament House trying lighter weight procurement processes, particularly when they needed specialist ICT skills.

Small businesses often don't understand how tendering works and don't have the resources to participate in large unwieldy and proprietary processes. For instance in NSW you must purchase a particular piece of software to even submit a tender in the first instance. If the process were simplified, smaller companies could participate more and as such offer more choice and diversity to government, from which the best fit for purpose and value for money can be better determined.

It was also suggested that the tendering process needs to be more open, and have full disclosure.

One suggestion was that tiered levels of process depending on the size, risk and value of a project could be created. This might mean smaller low risk projects may have less tender overheads than a high risk and very large project. Perhaps this could create more opportunities for government to leverage innovative and agile smaller companies?

One Tweet mentioned "the siloing of tenders creates replication of systems and functionality, and biases legacy systems from the outset."

In 2007 the Australian Computer Society lodged a submission with the House of Representatives Science and Innovation Committee which included this section devoted to Government Procurement processes:

> *Government can have a significant impact on innovation in the local ICT sector by ensuring its purchasing policies and practices allow local businesses a genuine opportunity to respond to Government tenders. Government can act as an important reference site for local suppliers seeking to enter the export market.*
>
> *However, doing business with Government is costly and complex with multi-jurisdictional requirements adding to the inhibitors for companies providing solutions to Government.*
>
> *Government is an inherently risk averse customer. While it is proper to apply sound risk management strategy when dealing with tax-payers money, the current level of risk aversion can preclude more innovative solutions being offered to tenders.*

Tenders and requirements are often specified with an eye to a preferred result and have a bias towards existing and known products, capabilities and providers. This invariably favours large multinational ICT providers and does not create an incentive to look to innovative product solutions, cutting out an important development opportunity for local ICT businesses.

The ACS strongly encourages the Government to implement purchasing practices and policies that allow for piloting of new innovations and incorporate risk management strategies to mitigate risks associated with new solutions. This will benefit Government efficiency as well as local suppliers. One possible way of achieving this is to allow a small percentage (say 1.5%) of departmental procurement budgets to be dedicated to pilot testing of innovative solutions to determine their suitability and effectiveness. This would manage risk and the piloted solution could be made available to all Government departments who may have a need for it.

The ACS acknowledges that the role of departmental heads is to provide goods and services in the most efficient and cost effective manner and not necessarily to be concerned with speculative innovation. However to address this concern, AGIMO, for example, could oversee the pilot testing process and create a database of leading edge but feasibility certified Australian technology solutions. With the Australian Government as a credible reference site, the export potential of the solution is vastly improved.

b. Tendering requirements

It was noted that it can be difficult to extract what the eligibility requirements for a tender are from government. An example was given of a NSW tender that was lost because they had put forward an Open Source solution and as such had no cost in the software licensing fee. This is obviously a problem in old processes and expectations limiting the opportunity for new solutions and approaches.

It is seen as a large risk and effort to even attempt to respond to government tenders, and as such government misses out on many innovative solutions and companies' input.

Finally on requirements, it was noted that "govt tenders still specify single vendor solutions" which often locks out any alternatives even though there may be better, cheaper and more innovative ways to solve the problem. There needs to be more recognition and encouragement of innovation within tender responses.

c. Tender panels

Panels were seen to exclude innovation for the lifetime of the panel. In some states there are limited and hard to change lists of software for procurement, and other solutions are simply not considered, which obviously excludes innovative and alternative approaches that may fulfil the requirements as well or better.

d. Support mechanism for tendering

Some groups discussed the importance of support for small to medium sized businesses so they can learn and as such participate in the tendering processes. Perhaps the linking of or aligning of tendering

processes across different jurisdictions would simplify things? Every agency has its own language and requirements and this is a large barrier to entry for small to medium sized businesses to compete. Even the process of getting onto supplier panels is seen as too slow and heavyweight.

3. Government as a client

a. Cashflow

Government often is seen to be slow to pay, and as such this adversely affects cashflow and is seen as a risk to small businesses.

Industry segment 1: Mobile and Web

1. Local industry

a. Government slow to participate

Government was seen as slow to contribute to or participate in both the mobile and web space. It was not clear whether this was the reality or the perception.

b. Developing local excellence

There are strong opportunities in the mobile space both locally and internationally, and this is one area where Australia is punching above its weight, and is more advanced than many other parts of the world, particularly the US (according to one discussion group, reference needed). As such this is a key area that Government could recognise and support to help place Australia at the forefront of the global competitive market.

Example: http://www.wotif.com/

c. Opportunity for emergency management

Emergency management was identified as a particularly useful application of mobile and geospatial technologies. Geo-location at a network layer is already used by Telcos, and should be compulsory for emergency services.

d. Competition

The question was raised about how can we ensure Telecommunication organisations and other companies don't create "walled gardens" and lock out competition from mobile or web innovation? Perhaps it could be anti-competitive for device manufacturers to control what can and can not be installed on a mobile device. The US Free Trade Agreement still impacts the local industry and "means we are stuck with some of the anti-competitive things that the likes of Apple are doing" according to some participants.

2. Policy development

a. IPV6

IPV6 was raised as an important issue with the question "when will it happen and can Government facilitate adoption?". The Federal Government actually does have an IPV6 strategy which is already being rolled out. It's called A Strategy for the Implementation of IPv6 in Australian Government Agencies.

b. Establish a National Broadband Digital Applications Lab

One discussion group suggested the establishment of a National Broadband Digital Applications Lab - to assist Australian startups develop and commercialise new applications to get Australia ahead in this area. i.e. remote medical applications, games, educational, entertainment, enabling rural and regional business.

Industry segment 2: ICT Infrastructure

1. Industry reflections

a. Utility based approach

One discussion group treated telecommunications as a utility, like electricity. As such, similar policy and assumptions (they suggested) should be applied to telecommunications networks; like electrical ones. The greatest changes and opportunities facing telecommunications organisations is because of Internet Protocols and moving from a connection fee charge to charging by bandwidth (usage or access). In technical terms we talk about the change from the PSTN to an all IP network.

2. Bandwidth to power a nation

a. Speed vs download caps

Many people mentioned high speed bandwidth (and the NBN) as vital in both ICT and Creative industry growth. The importance of high speed bandwidth outside big cities was mentioned, and considering Public Sphere is streamed online, many people found their bandwidth was pushed to the limit, and their download capacities stretched in just this one online video conference, so an increased download capacity would need to be considered along with speed. There was concern from one participant that the NBN might be old technology by the time it is rolled out.

Many of the problems we are experiencing with lack of competition will possibly evaporate as Telstra separates their wholesale and retail divisions (functionally) as it has Overseas.But the problem for Australia's remote communities will be having an aggregator who acts to provide (uncapped) bandwidth at an economic price. Perhaps local councils have a part to play here.

b. Internet filtering

People generally felt, and a few speakers mentioned that Internet filtering was not good for industry development as it "limits innovation and productivity".

c. Open standards

Several people mentioned the importance of mandating open standards for infrastructure, such as IPv6 and Sembweb was also mentioned in passing on Twitter.

3. Mobility Infrastructure

In the Melbourne node, the need for staff mobility was raised as an issue. Apresenter of the Melbourne session, Christopher Hire of 2thinknow discussed a comparison with overseas competing cities and regions of Germany, Japan and broader Europe & Asia.

a. Mass Transit in Cities

Broadly speaking, it was felt that mobility through city and metropolitan mass transit was a key method of better utilising staff - especially ICT specialists - across larger areas. A specialist in a region would be able to be better deployed elsewhere, through mass transit.

b. Mass Transit between Cities and Towns

Attendees discussed the working time available of mass transit to study, or to work on laptops with wireless enabled - whilst in transit. This is possible in many developed countries. European cities were raised as examples, as well as improvements in China 'catching up' in transit. Japanese Bullet, French TGV and German ICE trains were given as an example.

4. Local Infrastructure Funding/Local development

It was raised that local infrastructure funding in areas such as transit or Defence provides ICT opportunities for software and services. Local software solutions are sometimes overlooked in favour of and being replaced by 'off-the-shelf' US or offshore solutions. This touched on points made in Wollongong by presenters on Australian risk-aversion to supporting local companies.

5. Resources for this topic

- Comparative Cities - Innovation Cities Analysis - Innovation Cities Analysis Report
- Text Notes from Melbourne Node - Notes from Melbourne

Industry segment 3: Creative Industries

1. Industry specific ideas

a. Creative industries are an innovation driver

One speaker mentioned the Creative Industries as being recognised as driving innovation, this was agreed to by several online participants.

b. Authenticity on content

One group said "Contributions coming from everywhere. Informal peer review is important in identifying authenticity".

c. Common ID or Single Sign On

This goes with the point above, and relates to the need to settle on some form of identification for all Australian Citizens, so they may begin working in Informal peer groups, from inside and outside .gov.au and .edu.au institutions. AGOSP has been promised for some time now, and there is a concern in some places that a Single Sign On, as opposed to an online *presence*, may limit a citizen's participation and privacy. Regardless, no online innovation is going to happen until something like a me.edu.au or me.gov.au (for all citizens) is put in place.

d. Education

There needs to be both a focus on both ICT and Creative skills in education, as well as a differentiation between them.

e. Showcasing where ICT meets Creative industries

There needs to be more showcasing of the blended strength of the Creative and ICT industries. An example of Open Day at linux.conf.au (the regions premier Linux and Open Source technical conference) was given which through showcasing these projects grows interest and participation.

f. Raw Materials

Every gov.au web sites contains the raw (digital) material needed to develop creative media and education. At the recent GLAMwiki conference these recommendations were made.

- Use a "free-culture" Creative Commons license (for example either CC-by or CC-by-SA) for content on websites which is owned and controlled by the institution. For example fact sheets, inventory files, photos of objects, statements of object significance and educational materials.
- Publish stable and clean URLs for individual item records in collections, incorporating persistent identifiers.
- Make metadata accessible and available

- Provide read/write access to a complete database of metadata. For example bibliographic authority files
- Do not use popup windows for searching catalogues and do not hide the URL for the catalogue results.
- Place multimedia content online at a high enough resolution for effective educational use (e.g. 1000pixels along the shorter side @72dpi for photos) which does not need to be archival quality.
- Place links and other online information such as geotags to object descriptions in exhibitions e.g. with QR codes.

2. Resources for this topic

GLAMwiki Recommendations

General and Miscellaneous

1. Government

a. Clear government engagement in this area

Government needs to better engage with the industry, above and beyond the "representative" groups which often do not represent local, entrepreneurial or bleeding edge interests. There needs to be clear government leadership in this area. In the US there is a Chief Technical Officer dedicated to driving the technology strategy for the country. This would need to include tracking of trends to identify new opportunities and skills required (to feed into education and into strategies around industry development and support), and a change in how government perceives this sector to be more informed in current sectors, especially around information economy based companies and technologies.

b. Internet infrastructure

The NBN was seen by many participants as a great opportunity for Australia businesses, and in particular the ICT & Creative industries. There were concerns expressed over:

- International speeds - the NBN is focused on national speeds, but upgrading international access is also important.
- Competition - there was concern that unless managed right, the NBN may stifle competition. It was suggested in the Silicon Beach paper that the NBN needs to be a government managed wholesale network.
- The proposed "clean feed" - several participants and the Silicon Beach paper believe a mandatory filtered Internet was a problem on commercial, philosophical and practical grounds.

c. Government innovation

Many participants believe that government can and should be innovative (for example, some thought ETax to be quite innovative) however many participants also believe that government should simply make data and APIs open and empower the general public and industry to innovate. Perhaps these are both attainable.

d. ICT and Creative Industry Policy Ideas

The Melbourne remote group asked "What would be good policy in technology for 2012, 2015, 2025?" with some great resulting ideas:

- establish a series of publicly operated state based business accelerators for new technologies and companies based on world best practice eg., the business incubators at Cambridge, UBI UK, Sophia Antipodies France, Austin US, etc.
- policy toward level playing fields for access to affordable high speed internet that isn't related to a persons location. The questions was asked whether this could be addressed even before we have an NBN.

- better policies related to green IT in terms of government themselves and incentives for the private sector. Energy infrastructure should incorporate the harvesting of energy from vehicles, houses, buildings etc.
- immersive 3D environments - And 4d which becomes time based (for online trading systems etc)
- policies focused on the infrastructures in our cities and towns. Where ICT & Creatives startups can 'do what they do' organically. For Example mobgreen infrastructure, smart sensors and smart technology in cars.

2. Culture

a. Dismissive culture towards ICT

For ICT in particular, there is a national perspective that it means "just computers" and is often dismissed for topics seen to be more important - such as health, sport or education - when ICT does in fact underpin everything else. This culture towards ICT needs to change in order to get broader support, interest, skills and ultimately success at a global level.

This is changing with the generational shift of people born with the expectation of the Internet, social media and ubiquitous access.

b. Recognise success, mentoring

It would possibly help turn around the attitude towards ICT if local success, and local innovators were better recognised and celebrated. Perhaps successful people and companies could be assisted to mentor up and coming innovators and companies.

c. Accepting risk and failure as ok

The risk averse nature of the Australian market means that there are both less opportunities for ICT & Creative industry startups, and the market itself (particularly government) misses out on many opportunities for innovative and effective solutions. There needs to be a cultural embracing of risk and of the idea that failing is not a terrible thing. For instance, a few failures may result in some outstanding successes and indeed most successful entrepreneurs have failed at some stage.

d. Overseas seen as so much better

There is a cultural cringe here that needs to be addressed. For instance the question was raised why QUT had ads promoting students who are going overseas. Currently people strive to move to Silicon Valley or similar innovation hubs around the world. We need to work on establishing Australia as an innovation hub that also includes the lifestyle perks.

3. Basic principles

a. Open Data

Several speakers and other contributors have brought up the importance of open access to data, especially government data for industry growth and development. As the Silicon Beach paper says "as it is the information revolution, setting free information helps that revolution. One of the key trends identified by the leaders of information technology globally, is on opening up data silos and reusing them in innovative ways. The government has vast mountains of valuable data that could really promote innovation in this area. An example where the government prevented innovation in the past was with maps. For example, Google Maps was invented in Australia, but it was only implemented here a lot later – long after it had become popular overseas.

A lot of other competing companies have struggled to enter the market due to the licensing costs imposed by the government– which are non-existent in overseas markets. An example of what the government could do, is to follow the leads of the Obama administration in the creation of http://data.gov, and the UK government, who is currently being advised by Sir Tim Berners-Lee (the inventor of the Web) on how it can open up its data silos. Only days ago, San Francisco's mayor announced the opening up of government data which he expects will allow creative uses of it, to create new innovate information products."

b. Open Standards & APIs

Open standards were discussed by several speakers as important in government use of and demand for technology, especially as they help with interoperability, and as such in helping maintain an equal playing field for the delivery of services. When a government department gets locked into a specific solution or format, it makes it more costly to move away, and as such unfairly biases against competition.

The Silicon Beach paper relates open standards to open data in saying "practical steps that the government can do to pursue this is by supporting open standards - technical specifications that the market can adopt in the same way consistent railroad gauges leads to a stronger national rail network - that allows government data to be reused with ease."

c. Open Source

Some participants saw Open Source as important, others felt that due to the onset of cloud services, it was less relevant. The success of open and collaborative development (ideas, software, content) was however brought up several times as a model that could be applied more broadly an in this case to assist Australian companies to both leverage broader crowdsourcing methodologies and outcomes (such as building on existing Open Source tools, or open data sets) as well as to reach a global market through similar distribution and business models.

4. Regional/Remote Australia

a. Investment

A few people suggested that investment in regional Australia, particularly in infrastructure, would help drive innovation and industry development outside of metropolitan areas.

b. Education

Better education of people in remote and regional Australia was suggested, but also learning from the unique lessons learned in regional and remote Australia.

Recommendations

Please note all recommendations are a collaborative effort between all participants. Recommendations were added to an online endorsement system on November 24th 2009 for participants to provide final quality assurance on the ideas. Information at http://senatorlundy.ideascale.com/ Results provided in this report were as of the 30th November.

1. Funding & Startups

a. A review of the funding lifecycle for ICT & Creative industry startups

The review should be conducted in order to understand and fix gaps in this area.

b. Put in place a scheme similar to Commercial Ready

Currently, the COMET program allows individuals and early-stage companies to turn an innovative idea into an initial product. The next step - the transformation of an initial product into a successful product - used to be supported by the Commercial Ready program. In the ICT space, there is no new alternative program that supports this transformation step which tends to require more investment into R&D than any of the earlier and later stages. The advantage of the Commercial Ready program was that it assisted companies that reached this transformation step and allowed them to leverage private investment through matching funding.

A scheme that supports large commitments of R&D work in ICT is imperative for Australia to enable small start-ups to have a sustainable future in Australia and not to limit their potential for growth and innovation.

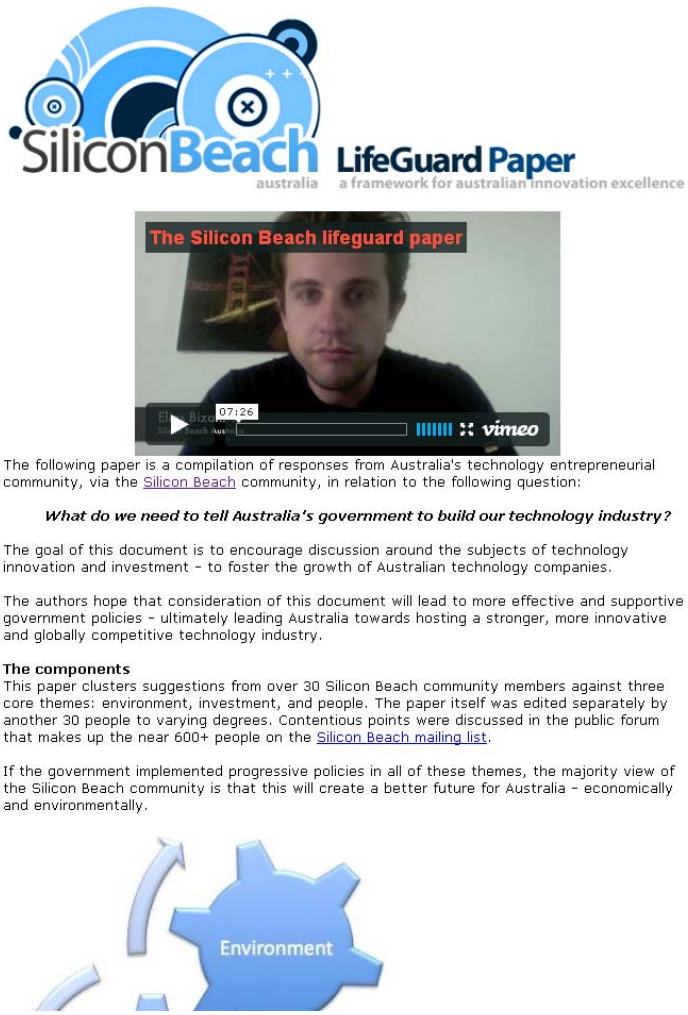
c. Rollback of the government ESOP policy

The government should roll back the Employee Stock Ownership Plans (ESOP) policy, which makes it more difficult for startups to attract top tier talent with share options, as many startups can't afford larger salaries of established companies.

d. Tax incentives recommendations

The following tax incentive recommendations are from the Silicon Beach Lifeguard paper.

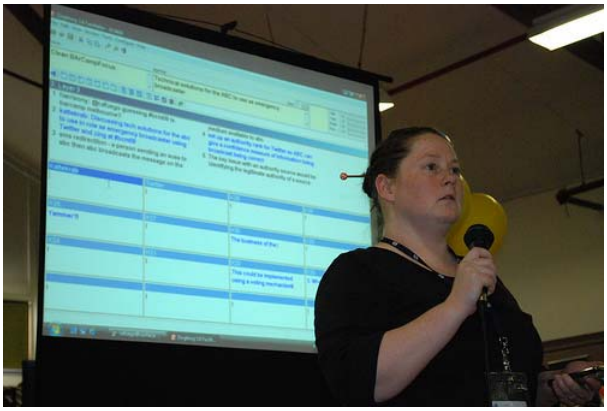
- **R&D investments** - In addition to reducing the cost of business for this research-intensive sector, more prominent impacts would be multinationals relocating their R&D centres to Australia, which upskill the local industry. Having said that, the current R&D tax allowances have been considered very helpful.
- **Investors in startups** - Angel investors play a fundamental role in the capital ecosystem, as they typically fund a concept that can go to launch – which latter get funded by venture capitalists, whose role is when a company has a market presence. By giving tax breaks to legitimate angels, it will see those with capital redirecting their wealth into the engine room of the economy.
- **CGT on companies building value** - The exit of a startup is core to the Internet industry, and capital gains on this exit has the potential to motivate or disincentivise market participants.
- **Startups in the first two years** - A functional definition of a startup is one whose revenues do not exceed its operating costs. It typically takes a few years for a startup to graduate to a growth business, which is when they pay actual tax – so a policy exempting startups in their first two years would have minimal impact to government taxation revenues. Often the largest cost for any startup is human resources and the PAYG upon this can be a significant portion of their budget. Eliminating these taxes on the first two years of a startup, will have global entrepreneurs and investors wanting to start their business in Australia with a stronger motivation to build revenue quicker.
- **Create a tax-free economic corridor** - There is a lot of thought that needs to go into this which won't be detailed here, but the concept is simple and has proven to work in a variety of Asian countries in the past. As a case in point, lower tax has such a powerful motivator, that dozens of global companies have restructured their operations in such a way, that all money flows through Ireland. By identifying a 50 by 50km radius somewhere in Australia where companies with a certain criteria are tax free for 10-20 years, in the medium term a transformation could occur in Australia's competitiveness that will last for the long term.



- **Payroll tax** - Although this is a state tax, it's a common complaint by the Silicon Beach community. Some sort of arrangement that exempts small business will see more people being hired by startups.

e. Funding Innovative Start-ups - HECS/HELP scheme

Examination of the feasibility of using existing HECS/HELP infrastructure to fund start-up businesses needing relatively small sums of seed funding, perhaps similar to the cost of a university full-fee degree. This would probably take the form of initially an analyst report on the scope and workings of the idea, followed by an economic and policy analysis. This idea was raised in the Melbourne node, and felt to be an innovative and original contribution by many present.



Such an approach would leverage existing infrastructure (ATO), have inherent enforcement guidelines (those for HELP) and reduce the risk of grants as the risk is shared (recipients repay from wages irrespective of success of venture).

2thinknow (who participated in the consultation) recommend the development further of this idea with analyst report.

f. Analysis of the effectiveness of existing business development services, and identification of gaps (particularly pertaining to ICT & Creative industry)

The currently offered business support and development services need to be assessed for effectiveness, for gaps (such as support for the difficult growth period of micro-businesses) and for any gaps specific to the ICT and Creative industries.

g. Create a simple communication plan for grants

There needs to be a simple way to find, subscribe to and identify appropriate grants available from the government.

h. Create a fertile centre for ICT innovators

ICT startups require a good mix of mentors, investors, potential customers, and talent to succeed. Overseas startup centres have been created where potential founders can get in contact with these in favourable environments. They get the opportunity to develop their product ideas to a first demonstration stage with minimal funding and hardware/networking support, so they can test the product with potential customers and investors. Such fertile centers for ICT innovators are also necessary in Australia.

2. Talent

a. Develop better ICT skills in education

All schools, adult education and higher education must improve their ICT skills development to incorporate basic computer literacy, task automation, basic programming, project management, troubleshooting, online collaboration and online contributing just to name a few. These skills will drive innovation and productivity regardless of the industry or job description.

b. Develop entrepreneurial skills in education

All Australian schools and universities should establish programmes to develop entrepreneurial skills. This may include thought leadership programmes, student exchanges and student 'companies'.

c. Create a mentoring program in education

All Australian schools and universities should establish programmes to aid mentor student connections. This may include thought leadership programmes, student exchanges, and mentoring from successful entrepreneurs.

d. Create a yearly skills demand consultation with the industry to inform education curriculum

There should be an open, easy to contribute to aggregation and prioritisation process of skills demanded by the ICT and Creative industries which could be reflected by the education curriculum (particularly in adult and higher education). Universities and Adult Education institutes need to be flexible in integrating new skills sets that are high demand in order to more rapidly have access to needed skills and feed the industry growth.

3. Government Procurement

a. Government should purchase local technologies where possible

The government should give local companies a fairer chance of succeeding. Often there is locally developed technology available that competes with an international product. The safe choice is to go with the international product which tends to have an international reputation, tends to have a big company name behind it, and tends to be more expensive. Local companies lose out even though they tend to be more competent and much cheaper, simply because of lack of international reputation.

b. Government should be more open to being the first customer of local products

Australian companies in general – and the government in particular – have a tendency to regard locally developed technology as inferior to technology developed overseas. The government should be encouraged to be a trial customer of locally developed ICT products more often. AGIMO could be tasked

with pilot testing Australian innovative products and adding them to a list of feasibility-certified solutions which are then eligible to be tendered despite the absence of customer reference sites.

c. A review of the tendering process and the impact on local industry

A review should be conducted on the difficulty and limitations of current tendering processes, and how they limit local and small industry responses and therefore delivery of services. There should also be included a review of the resulting opportunities lost for innovation, for high value solutions and for broader socio-economic growth through the tendering limitations for local and small businesses so there can be a real understanding on what is at stake.

d. Government should aid SMEs in tendering

The Australian Government help small to medium enterprises in the government tender processes to grow the local capability and industry, and to leverage local innovations.

e. Review the impact of the US Free Trade Agreement on the ICT and Creative industries to date

This would greatly assist in understanding the impacts and as such potential future issues or opportunities to deal with.

4. Mobile & Web 2.0

a. The policy development and subsequent support of the Australian mobile and web industry

As Australia is already doing particularly well in both these emerging areas, there needs to be an understanding of Australia's capacity, the socio-economic opportunities for Australia, and the subsequent policy and strategies put in place to drive forward Australian companies to compete on the global stage.

b. Establish a National Broadband Digital Applications Lab

Australia should create and establish of a National Broadband Digital Applications Lab - to assist Australian startups develop and commercialise new applications to get Australia ahead in this area. For example, remote medical applications, games, educational, entertainment, enabling rural and regional business.

5. ICT Infrastructure

a. Increased Bandwidth

Australia should commit itself to optimising and expanding the bandwidth by optimising competition and ensuring an economical price.

b. Internet Filtering

Participants believed that filtering the internet will lead to limiting innovation and productivity

c. Transportation

Local transport should be able to accommodate the use of ICT through the use of items like wireless internet similar to those used in Europe

6. Creative Industries

a. Education

There needs to be both a focus on both ICT and Creative skills in education, as well as a differentiation between them.

b. Merging Creative Industries and ICT

There needs to be more showcasing of the blended strength of the Creative and ICT industries to grow interest and participation throughout both fields

7. Miscellaneous & General

a. Better showcase Australian successes

Australian success stories in ICT are not very well known. In comparison to our idols in sports, we do not celebrate our idols in technology. It might be possible to include such knowledge into our education system, in TV programs, in public events. Increasing that knowledge generally will have positive impact on all aspects of concern – for example on education, investment and procurement.

b. Eliminate the stigma

There needs to be a removal of the thought that ICT is "just computers". This culture towards ICT needs to change in order to get broader support, interest, skills and ultimately success at a global level.

c. Encouraging People to stay on shore

Currently people strive to move to Silicon Valley or similar innovation hubs around the world. We need to work on establishing Australia as an innovation hub that also includes the lifestyle perks. There is a cultural cringe here that needs to be addressed.

d. Encouraging Open Data

Open Data needs to be adopted into government to facilitate the use and ease of public information and relevant systems.

e. Increasing remote participation

Australian governments should have clear policies that promote the growth of ICT and creative industries related projects in rural communities. These policies could include special benefits for projects that demonstrate a direct impact on rural development.

8. Resources for this topic

- 2thinknow, Independent Innovation Analysis - Independent Innovation Analysis Reports

9. Endorsements of these recommendations

The recommendations were put into an online endorsement system (IdeaScale) and the results are below.

Votes **Topic and details (including any comments left)**

24 Talent: Develop entrepreneurial skills in education

All Australian schools and universities should establish programmes to develop entrepreneurial skills. This may include thought leadership programmes, student exchanges, student 'companies'.

Comments (2)Public Sphere

Nathanael Boehm 5 days ago

I support this - was something discussed during Global Entrepreneurs Week last week.

undefined undefined 4 days ago

Would that it were possible. I think funding a regular series of 'publicsphere' events, which would use the best technology available in include unis and schools, and see them attempting to professionalize their media would make more of an impact though.

17 Government Procurement: Review of tender process & local impact

A review should be conducted on the difficulty and limitations of current tendering processes, and how they limit local and small industry responses and therefore delivery of services. There should also be included a review of the resulting opportunities lost for innovation, for high value solutions and for broader socio-economic growth through the tendering limitations for local and small businesses so there can be a real understanding on what is at stake.

Comments (4)Public Sphere

Nathanael Boehm 5 days ago

Yep, this is more what I was looking for. Vote this one up!

Ric Hayman 4 days ago

Agreed, and done!

peter.holland98 4 days ago

Perhaps looking at the drawn out process of accepting a winning solution and implementing needs to be addressed. The timeframe between responding and signing is currently the difference between a company folding or surviving with limited cashflow.

pia.waugh 4 days ago

Thanks for the comments, this has been a key concern for a lot of people.

14 Talent: Develop better ICT skills in education

All schools, adult education and higher education must improve their ICT skills development to incorporate basic computer literacy, task automation, basic programming, project management, troubleshooting, online collaboration and online contributing just to name a few. These skills will drive innovation and productivity regardless of the industry or job description.

Comments (0)Public Sphere

11 Funding & Startups: Create a fertile centre for ICT innovators

ICT startups require a good mix of mentors, investors, potential customers, and talent to succeed. Overseas, startup centers have been created where potential founders can get in contact with these in favourable environments. They get the opportunity to develop their product ideas to a first demonstration stage with minimal funding and HW/networking support, so they can test the product with potential customers and investors. Such fertile centers for ICT innovators are also necessary in Australia.

Comments (0)Public Sphere

10 ICT Infrastructure: Increased Bandwidth

Australia should commit itself to optimising and expanding the bandwidth by optimising competition and ensuring an economical price.

Comments (0)Public Sphere

10 Government Procurement: To be first customer of new products

Australian companies in general – and the government in particular – have a tendency to regard locally developed technology as inferior to technology developed overseas. The government should be encouraged to be a trial customer of locally developed ICT products more often. AGIMO could be tasked with pilot testing Australian innovative products and adding them to a list of feasibility-certified solutions which are then eligible to be tendered despite the absence of customer reference sites.

Comments (0)Public Sphere

9 Misc: Eliminate the stigma

There needs to be a removal of the thought that ICT is "just computers". This culture towards ICT needs to change in order to get broader support, interest, skills and ultimately success at a global level.

Comments (1)Public Sphere

peter.holland98 5 days ago

ICT by definition is Information, Communications and Technology. Not many end users know what ICT stands for, but they all know what IT stands for. ICT is something that needs to be represented by multiple disciplines, and the best way to ensure that it is recognised is to educate the next generation as to what it is.

9 ICT Infrastructure: No Internet Filtering

Participants believed that filtering the internet will lead to limiting innovation and productivity

Comments (0)Public Sphere

9 Government Procurement: Purchase of local tech where possible

Often there is locally developed technology available that competes with an international product. The safe choice is to go with the international product which tends to have an international reputation, tends to have a big company name behind it, and tends to be more expensive. Local companies lose out even though they tend to be more competent and much cheaper, simply because of lack of international reputation. The government should give local companies a fairer chance of succeeding.

Comments (2)Public Sphere

Nathanael Boehm 5 days ago

Is the proposal to simply encourage government to look locally first? I think the proposal should actually be review government procurement frameworks as I don't believe existing processes are particularly effective in managing risk and selecting the best possible vendor. However I'll still vote for this one.
pia.waugh 5 days ago

Thanks for the comment Nathanael, I think that is a useful addition to the point. Thanks for the vote.

6 Misc: Encouraging Open Data

Open Data needs to be adopted into government to facilitate the use and ease of public information and relevant systems.

Comments (0)Public Sphere

6 Creative Industries: Merging Creative Industries and ICT

There needs to be more showcasing of the blended strength of the Creative and ICT industries to grow interest and participation throughout both fields

Comments (1)Public Sphere
Nathanael Boehm 5 days ago

I would love to see the the profile of the Australia Council for the Arts Geek in Residence program lifted. It's an excellent initiative and one that I think could be expanded outside the creative/arts industry to educational institutions, not-for-profits and more.

6 Funding & Startups: Rollback of the government ESOP policy

The government should roll back the ESOP policy, which makes it more difficult for startups to attract top tier talent with share options, as many startups can't afford larger salaries of established companies.

Comments (0)Public Sphere

6 Funding & Startups: Tax incentives recommendations

The following tax incentive recommendations are from the Silicon Beach Lifeguard paper.

• R&D investments - In addition to reducing the cost of business for this research-intensive sector, more prominent impacts would be multinationals relocating their R&D centres to Australia, which upskill the local industry. Having said that, the current R&D tax allowances have been considered very helpful.

• Investors in startups - Angel investors play a fundamental role in the capital ecosystem, as they typically fund a concept that can go to launch – which latter get funded by venture capitalists, whose role is when a company has a market presence. By giving tax breaks to legitimate angels, it will see those with capital redirecting their wealth into the engine room of the economy.

• CGT on companies building value - The exit of a startup is core to the Internet industry, and capital gains on this exit has the potential to motivate or disincentivise market participants.

• Startups in the first two years - A functional definition of a startup is one whose revenues do not exceed its operating costs. It typically takes a few years for a startup to graduate to a growth business, which is when they pay actual tax – so a policy exempting startups in their first two years would have minimal impact to government taxation revenues. Often the largest cost for any startup is human resources and the PAYG upon this can be a significant portion of their budget. Eliminating these taxes on the first two years of a startup, will have global entrepreneurs and investors wanting to start their business in Australia with a stronger motivation to build revenue quicker.

• Create a tax-free economic corridor - There is a lot of thought that needs to go into this which won't be detailed here, but the concept is simple and has proven to work in a variety of Asian countries in the past. As a case in point, lower tax has such a powerful motivator, that dozens of global companies have restructured their operations in such a way, that all money flows through Ireland. By identifying a 50 by 50km radius somewhere in Australia where companies with a certain criteria are tax free for 10-20 years, in the medium term a transformation could occur in Australia's competitiveness that will last for the long term.

• Payroll tax - Although this is a state tax, it's a common complaint by the Silicon Beach community. Some sort of arrangement that exempts small business will see more people being hired by startups.

Comments (1)Public Sphere

Ric Hayman 4 days ago

Gave this one a vote, although I think it should possibly be broken up into separate suggestions. I like and support the ideas about encouragement for angel investors, and the CGT relief on re-invested funds, but am very wary about asking the government for financial support as this support is often hijacked for political ends. Direct Government support is better left at the procurement process, and better opportunities for local participation in Government tenders (i.e. this is money that is going to be spent to fill some ICT need, not a hand-out)

6 Funding & Startups: Funding Innovative Startups HECS/HELP scheme

Examination of the feasibility of using existing HECS/HELP infrastructure to fund start-up businesses needing relatively small sums of seed funding, perhaps similar to the cost of a university full-fee degree. This would probably take the form of initially a analyst report on the scope/workings of the idea, followed by an economic and policy analysis. This idea was raised in the Melbourne node, and felt to be an innovative and original contribution by many present.

Such an approach would leverage existing infrastructure (ATO), have inherent enforcement guidelines (those for HELP) and reduce the risk of grants as the risk is shared (recipients repay from wages irrespective of success of venture).

2thinknow recommend the development further of this idea with analyst report.

Comments (0)Public Sphere

5 Misc: Better showcase Australian successes

Australian success stories in ICT are not very well known. In comparison to our idols in sports, we do not celebrate our idols in technology. It might be possible to include such knowledge into our education system, in TV programs, in public events. Increasing that knowledge generally will have positive impact on all aspects of concern - education, investment, procurement, etc.

Comments (0)Public Sphere

5 Funding & Startups: A scheme similar to Commercial Ready

Currently, the COMET program allows individuals and early-stage companies to turn an innovative idea into an initial product. The next step - the transformation of an initial product into a successful product - used to be supported by the Commercial Ready program. In the ICT space, there is no new alternative program that supports this transformation step which tends to require more investment into R&D than any of the earlier and later stages. The advantage of the Commercial Ready program was that it assisted companies that reached this transformation step and allowed them to leverage private investment through matching funding.

A scheme that supports large commitments of R&D work in ICT is imperative for Australia to enable small start-ups to have a sustainable future in Australia and not to limit their potential for growth and innovation.

Comments (0)Public Sphere

4 Misc: Increasing remote participation

Australian governments should have clear policies that promote the growth of ICT and creative industries related projects in rural communities. These policies could include special benefits for projects that demonstrate a direct impact on rural development.

Comments (0)Public Sphere

4 Talent: Create a mentoring program in education

All Australian schools and universities should establish programmes to aid mentor student connections. This may include thought leadership programmes, student exchanges, and mentoring from successful entrepreneurs.

Comments (0)Public Sphere

4 Funding & Startups: A simple communication plan for grants

There needs to be a simply way to find, subscribe to and identify appropriate grants available from the government.

Comments (0)Public Sphere

3 Misc: Encouraging People to stay on shore

Currently people strive to move to Silicon Valley or similar innovation hubs around the world. We need to work on establishing Australia as an innovation hub that also includes the lifestyle perks. There is a cultural cringe here that needs to be addressed.

Comments (1)Public Sphere
Nathanael Boehm 5 days ago

What about attraction to specific regions in Australia? Encouraging skilled people to seed innovation in rural areas or to move to Canberra for Federal Government roles? I mention the Is this a trend? Is government already saturated with these sorts of skills? Given they're shedding contractors I think not - so I think that part of this "keep people in Australia" could be taken down a level of detail to see where in Australia we should be looking to attract skilled resources.last one because there's a distinct scarcity of work for someone such as myself (user/social experience design, social media, service design etc) in Canberra. Only one relevant role in Canberra for every ten I pass up in Sydney and I may soon have to move away from Canberra.

3 Creative Industries: Education

There needs to be both a focus on both ICT and Creative skills in education, as well as a differentiation between them.

Comments (0)Public Sphere

3 Mobile & Web 2.0: Establish a National Broadband Digital Applica

Australia should create and establish of a National Broadband Digital Applications Lab - to assist Australian startups develop and commercialise new applications to get Australia ahead in this area. i.e. remote medical applications, games, educational, entertainment, enabling rural and regional business.

Comments (2)Public Sphere

peter.holland98 4 days ago

a problematic is the interaction between the govt and developers, who may feel that apps are stymied if they don't fit into a particular mold. creating an independent lab with participants from both industry and government would be of benefit, but as long as the framework was established from day one that the organisation would be an incubation group, not a commercial entity would prevent issues with probity and IP ownership.

pia.waugh 4 days ago

Thanks for the input Peter, that's a good suggestion. Perhaps the IP created could be open sourced and the commercialisation be around services etc? That could create a flow on effect for business and economic development.

3 Government Procurement: Government should aid SMEs

The Australian Government help small to medium enterprises in the government tender processes.

Comments (1)Public Sphere

peter.holland98 4 days ago

the current process allows for SME involvement, but this will change with implementation of the AGIMO initiatives, price is not the determining factor in a value for money proposal. Unfortunately, bastardisation of price is rife by resellers, the lower wins.

3 Funding & Startups: Analysis of business support gaps

Analysis of the effectiveness of existing business development services, and identification of gaps (particularly pertaining to ICT/Creative industry). The currently offered business support and development services need to be assessed for effectiveness, for gaps (such as support for the difficult growth period of micro-businesses) and for any gaps specific to the ICT and Creative industries.

Comments (0)Public Sphere

2 Mobile & Web 2.0: Policy development and subsequent support

As Australia is already doing particularly well in both these emerging areas, there needs to be an understanding of Australia's capacity, the socio-economic opportunities for Australia, and the subsequent policy and strategies put in place to drive forward Australian companies to compete on the global stage.

Comments (0)Public Sphere

2 ICT Infrastructure: Transportation

Local transport should be able to accommodate the use of ICT through the use of items like wireless internet similar to those used in Europe

Comments (0)Public Sphere

2 Government Procurement: Review of impact of US FTA/DMCA

A review the impact of the US Free Trade Agreement on the ICT and Creative industries to date. This would greatly assist in understanding the impacts and as such potential future issues or opportunities to deal with.

Comments (0)Public Sphere

1 Talent: Yearly skills consultation with the industry for edu

Create a yearly skills demand consultation with the industry to inform education curriculum. There should be an open, easy to contribute to aggregation and prioritisation process of skills demanded by the ICT and Creative industries which should then be reflected by education curriculum (particularly in adult and higher education). Universities and Adult Education institutes need to be flexible in integrating new skills sets that are high demand in order to more rapidly have access to needed skills and feed the industry growth.

Comments (0)Public Sphere

1 Funding & Startups: Review of ICT/Creative startup lifecycle

A review of the funding lifecycle for ICT & Creative industry startups. The review should be conducted in order to understand and fix gaps in this area.

Comments (0)Public Sphere

1 Collaboration between Industry and Government re new Technology - Recommendation created post briefing paper by peter.holland98

Creating a series of events to address the different views and focus of each channel segment - Small, Medium and Enterprise, might enable the Government to address key advances and uses of particular technology, for example, in the innovation sphere.

There are many organisations who have a great story to tell about their particular product or service, ranging from sole traders up to major corporations. Where can they meet with government to show their offering, except for a proposal or tender process?

A trade event tailored specifically at the Government sector would enable greater identification and implementation of the local industry offerings, and expand the reach of these companies to other potential clients.

Comments (0)Public Sphere

1 Internet and software for all.... - Recommendation created post briefing paper by peter.holland98

Why does the internet access for all australians cost much more than the basic services like Power or Water?

it is feasible to charge a user per a cents amount, rather than a dollar amount for internet access. Why is it any different to the existing infrastructure for a phone or power connection? If the internet was cheaper, then many people who don't have access now would. perhaps we would see an explosion in the innovation sphere, if many people could use the internet to design and implement their ideas. What about free internet in the detention centres, in gaols? who is paying for their access? why can't this option be expanded to cover all australians?

Software, prior to the GST, carried no Tax. Sales Tax was not applied to software, it was exempt. With the introduction of the GST, software prices went up. Not by 10%, but by a larger amount. Why? Because the cost of software needed now to include the administration costs to ensure that GST was collected, and paid to the Government.

Removing GST from software will have a marked effect. There will be a reduction in cost, allowing those less fortunate to be able to afford to use their computer efficiently. Children at school will see savings of 10%, which currently hits the parent's pockets and reduces the amount of money a family has at their disposal. If you include game software, console software etc in the no GST basket, christmas will see an increase in retail spend, as people can afford to purchase more than they could before.

Comments (0)Public Sphere

Case studies and References

1. Australian companies

- Atlassian - major ICT services company and exporter - http://www.atlassian.com/
- Hiive - startup company in Wollongong - http://hiive.com.au/
- Open Kernel Labs - successful spinout from NICTA in mobile space - http://www.ok-labs.com/
- Remember the milk - fantastic and globally successful tool developed in Australia - http://www.rememberthemilk.com/
- Event for local ICT startups - http://startupcampcanberra.com

2. Blogs and mentioned articles

- Donna Benjamin, "Zinging the Public Sphere" - http://cc.com.au/2009/09/04/zinging-public-sphere
- Christopher Hire, "Public Sphere Melbourne - Australian ICT & Creative Industries" - http://www.innovation-cities.com/public-sphere-melbourne-australian-ict-creative-industries/
- Gary Sauer-Thompson
  - "ICT: infant industry or bootstrap" - http://www.sauer-thompson.com/archives/opinion/2009/08/ict-infant-indu.php
  - "Canberra gaze: Kev + Julia" - http://www.sauer-thompson.com/archives/opinion/2009/08/canberra-gaze-k.php
- visibleprocrastinations, Announcement of Public Sphere 3 - http://visibleprocrastinations.wordpress.com/2009/08/28/public-sphere-3/

- Seradigm, "Blogstorming, Wikipolishing and simultaneous emergence?" - http://seradigm.co.nz/2009/09/03/blogstorming-wikipolishing-and-simultaneous-emergence.html
- Hannah Suarex, "Public Sphere 3: ICT & Creative Industries Development" - http://www.briscreativeindustries.com/blog/2009/8/28/public-sphere-3-australian-ict-creative-industries-developme.html
- Stilgherrian, "Australia's web 2.0 wipeout on the wave of the future" - http://www.crikey.com.au/2008/05/23/australias-web-20-wipeout-on-the-wave-of-the-future/
- Andrew Krzmarzick - "6 Competencies of a Gov 2.0 Leader" - http://genshift.com/government-20/6-competencies-for-a-gov-2-0-leader/
- Silvia Pfeiffer – "ICT & Creative Industry – Public Sphere Event" - http://www.vquence.com.au/2009/10/13/ict_creative_industry_public_sphere/
- Media release by University of Wollongong about Public Sphere

Event Briefing

1. Content and Schedule

Please note, all video, slides and transcripts are on the Public Sphere 3 blog page at http://www.katelundy.com.au/2009/07/24/public-sphere-3-australian-ict-creative-industries-development/

Welcome and introduction of process			
0900	Welcome to UoW and the Innovation Centre	Pro Vice-Chancellor of UoW – Joe Chicharo	
0905	Introduction to Public Sphere and process	Senator Kate Lundy	
0910	Address from Sharon Bird MP	Sharon Bird MP	
0915	Address from Minister Carr, Minister for Innovation, Industry, Science & Research	Minister Kim Carr (recorded)	
0920	Industry growth – what we need: The Silicon Beach paper	Elias Bizannes, Silicon Beach (recorded)	http://www.siliconbeachaustralia.org/lifeguard/index.html
0925	Global context	Christopher Hire (Melbourne)	Information at http://www.2thinknow.com and analysis at http://www.innovation-cities.com
Funding & startups			
0935	Small Pieces, Loosely Funded	James Dellow, Headshift	There are already plenty of examples around Australia of grass roots entrepreneurial groups (e.g. Silicon Beach) and other self-organising events (e.g. BarCamp) where self-starters in the industry have shown they are more than prepared to invest their own time and effort into creating a local Web 2.0 industry. Considering the value these already contribute to innovation in this country, imagine what we could achieve if the nation actually provided more active support? However, how do we balance the essence of Web 2.0 itself in these grass initiatives vs the overhead of government support?

0945	ICT innovation is easy – commercialisation is hard	Silvia Pfeiffer, Vquence, Silvia's blog	We have nothing to hide when it comes to ICT innovation. We have a good education system in Australia that creates many creative minds and many innovators. The problems that we have are what has traditionally been described as "crossing the chasm": taking a new technology from idea/demonstrator and turning it into a business. Having created a startup in Australia in the ICT space, I believe there are some valuable lessons that I can share. Also, I am keen to start a discussion about things we can do to improve the chances of success here in Australia rather than overseas.
0955	Using Lean approaches to strengthen the IT industry	Henry Vila (recorded)	The manufacturing industry has been able to use the principles of Lean and Just in time to create a sustainable competitive advantage for many years. There is an opportunity of the IT industry to grasp the principles mastered by companies like Toyota to deliver increased value and flexibility. By adopting a Lean mentality, the Australian businesses would be able to differentiate themselves from competitors and create a sustainable advantage, increasing efficiency and better serving our clients. Henry will also cover the application to policy.
1000	Discussion – specific opportunities, challenges and support needed		
1030	Morning tea		
Finding and developing talent			
1040	Developing skills for the ICT industry	Professor Amanda Lawson, UoW	The Faculty of Creative Arts at the University of Wollongong is engaging with the development of the Wollongong media practice community at a whole range of levels. We are introducing an innovative new degree in Digital Media, in partnership with the Illawarra Institute of TAFE, which will be based at iC and is geared towards industry fields such as gaming, animation and media production. There are opportunities for exploring digital interactions with traditional visual and performing arts, creative writing, informatics, graphic design and business studies. This talk will also discuss the broader need for relevant skills for industry growth.
1050	Making the Australian ICT landscape attractive for research, innovation and sustainable business.	Terry Caelli, NICTA (Brisbane)	
1100	Hiive	Geoff McQueen	Geoff will speak on the talent aspects of the Silicon Beach Lifeguard paper, and will talk about the skills needed to support the industry.
1110	Discussion – specific opportunities, challenges and support needed		
Government procurement			
1140	The challenges of government procurement for SMBs, and what can be done about it.	Loretta Johnson, AIIA	

1150	Cultural cringe an its impact on Government Procurement	James Purser, Collaborynth	One of the biggest problems Australia has is the Innovation Cringe. We like to think that we are the "Clever Country" and yet we constantly hear of innovations that have to move over seas because of a lack of support, whether it's from the private sector or Government. We need to overcome the Cringe if we are going to truly allow our tech and creative industries to grow.
1200	Too smart, too cheap and too small	Donna Benjamin, Creative Contingencies (Recorded)	Donna will discuss the challenges of small, innovative companies working with emerging technologies and trying to engage with government.
1210	Discussion – specific opportunities, challenges and support needed		
1230	Lunch		
Mobile & Web 2.0			
1300	Location-based Services for Emergency Management	Dr Katina Michael, UoW	The adoption of mobile technologies for emergency management, especially the application of mobile alerts and location-based services during natural disasters, has the capacity to save lives. Increasingly the power of Web 2.0 is being harnessed by citizens for instant messaging in the distribution of content for up to the minute reporting in critical situations. By managing this feedback loop better through intelligent systems, government agencies could better respond to emergencies. This talk would identify the main benefits and risks with such an approach and propose a strategic way forward. Katina will look at both the industry development and the security policy implications, particularly for emergencies situations. Papers http://works.bepress.com/kmichael/125/ http://works.bepress.com/kmichael/124/ http://works.bepress.com/kmichael/14/
1310	Innovation is important but it's Adoption that counts	Rob Manson	The challenge we really face is the "Diffusion of Innovations" as defined by Rogers and extended in "Crossing the Chasm" by Moore. Over the last 15 years I've seen a lot of ICT entrepreneurs pour their heart and soul into creating innovative new technology…yet very few of them had the skills to drive adoption…and all of those paid a high price for that. This presentation will look at how Web 2.0 and Mobile technologies are changing the "Diffusion of Innovations" and how government/public policy can take advantage of this to deliver real and tangible benefits for our local ICT & Creative industries.
1320	Discussion – specific opportunities, challenges and support needed		
ICT Infrastructure			
1350	Policy ideas relating to the ICT infrastructure sector	John Ferlito, Vquence	John will discuss challenges and policy ideas concerning the broader infrastructure sector including hosting, servers, networks and enterprise architecture.

1400	Green IT	Note: Graeme Philipson was originally scheduled for this slot, however on the day he was sick.	Green IT is a hot topic, but to many people it is all about reducing the carbon footprint of the IT function within the organization. That is important, but Green IT is about much more than that. IT has a significant role to play in helping reduce the carbon footprint of "the other 98%" that is not caused by IT – through more efficient supply chains, teleworking, improved business processes, etc. IT is also central to measuring and managing carbon emissions.
1410	Discussion – specific opportunities, challenges and support needed		
1430	Afternoon tea		
Creative Industries			
1440	Creative industries – setting the scene	Judith Bennett, Creative Industries Innovation Centre (Recorded)	A short talk setting the scene of the Creative industries in Australia, currently support available and future strategies.
1445	Crossing Borders	Des Walsh (Recorded)	This event is about ICT *and Creative Industries* but with due respect to the academics and the museum and library people, where are the industry practitioners from those significant sectors of the creative industries, the performing and visual arts? (Or am I not looking at the right list?). I'd like to see a series of regional and national "crossing borders" summits (ok, choose your "gathering" word), supported by government, run as unconferences (could be a bit dicey on the grant acquittal process, that one) and with a real blend of performing and visual artists of distinction together with our leading developers and ICT entrepreneurs, sharing, arguing, disagreeing, re-examining – in short, crossing borders of creativity to produce or stimulate who knows what.
1450	What IS a cultural asset?	A/Prof. Chris Gibson. Talk http://culturemap.org.au/ Please note: Chris was also sick on the day and unable to attend and give this speech.	I am part of a team of researchers based at the University of Wollongong interested in how creative industries emerge within cities and regions; how best to support them; and how they can meet economic and social goals. Previous research consistently shows that imported models, assumed wisdom and 'off-the-shelf' plans don't work, because creative industries are unusual, driven by cultural trends and populated by producers and consumers through social networks (rather than industry organisations). We need to understand what cultural assets exist in a place already – whatever they might be – and how they can better mesh with creative industries policy development? Our research project seeks answers to these questions.
1500	Online Culture IS the Culture	Tim Parsons	This presentation will build a bridge between the generations by positing the notion that 'Online Culture is now The Culture', (watch anyone in the modern workplace for more than 30 minutes in their daily routine and marvel at the plethora of network-enabled behaviours), and suggests a range of implications for the current level of attention or investment in local creative and ICT industries.
1510	Social Media and Creator Cultures: The Virtual Museum as	Peter Eklund - Demonstration video	The Virtual Museum of the Pacific (VMP) is a social media research project that tests a digital ecosystem

	a Digital Ecosystem		to access museum-based collections whose artifacts are physically distributed and often not on public display. The project leverages social tagging for knowledge creation and studies the effective means of presenting and interacting with this network for traditional owners, the general public, researchers and curators.
1520	Discussion – specific opportunities, challenges and support needed		
General discussion			
1540	Freestyle discussion – any other policy ideas, perhaps specific to locality, or topics not covered during the day.		
1610	Group presentation from Brisbane		
1625	Group presentation from Melbourne		
1640	Group presentation from Wollongong		
1655	Close		

2. Public Sphere overview

This Public Sphere engages with the ICT and creative industries, as well as the broader community to identify areas where government policy can be developed or enhanced to better facilitate the growth and development of these industries in Australia. The ICT and creative industries have been shown around the world to be a massive contributor to national and global economic and productivity growth. It is extremely important – particularly given the current global climate – that we prioritise support for ICT industry growth and development in Australia.

Discussion on this Public Sphere topic opened on 24th July 2009 via a blog on Senator Lundy's site. The Public Sphere Camp was held on 28th August 2009 in three simultaneous locations. All proceedings were directed from the Wollongong location, with two remote nodes in Sydney and Melbourne. There were of course also many other remote participants however we wanted to experiment with scaling by incorporated remote simultaneous events. This draft briefing paper, was opened for public contributions via this Wiki on 9th September 2009 and will close for finalisation on the 30th September 2009. The briefing paper will be submitted to the Information Technology Innovation Council and the Commonwealth Commercialisation Institute, both initiatives under Minister Kim Carr, Minister for Innovation, Industry, Science and Research.

a. Event Overview

The Public Sphere on ICT & Creative Industry development last Friday drew together people from all over the country as well as Australians residing overseas. The event pushed the boundaries by including 3 locations (Wollongong, Melbourne and Brisbane) with Senator Lundy running the schedule from Wollongong.

Due to the complex nature of this last Public Sphere, there were some technical issues on the day as each location had streaming video to broadcast talks. Regardless, the outcomes from the day are excellent. There were also several pre-recorded talks that were submitted. The schedule was made up of primarily self-identified people from the ICT & Creative industries interested in putting forward some ideas for the day, and stimulating the discussions from which great policy and other ideas can be drawn. Participation

We had around 100 physical participants on the day, and another 400 people remotely watching the Live Wall, which aggregated the video, Twitter, Flickr and Live Blogging content for easy access. We also had representation from the AIIA, ACS, OSIA, ICT Illawara, Innovation Cities, the Creative Industries Innovation Centre and the Silicon Beach group, amongst other organisations, as well as many individuals and businesses.

One Tweeter said: "I think meetings like public sphere are paramount for critical and open discussion in particular for academics" and then "More and more the community will realise that they can and should get involved in sharing their ideas with one another". This was great feedback and validation for the Public Sphere model.

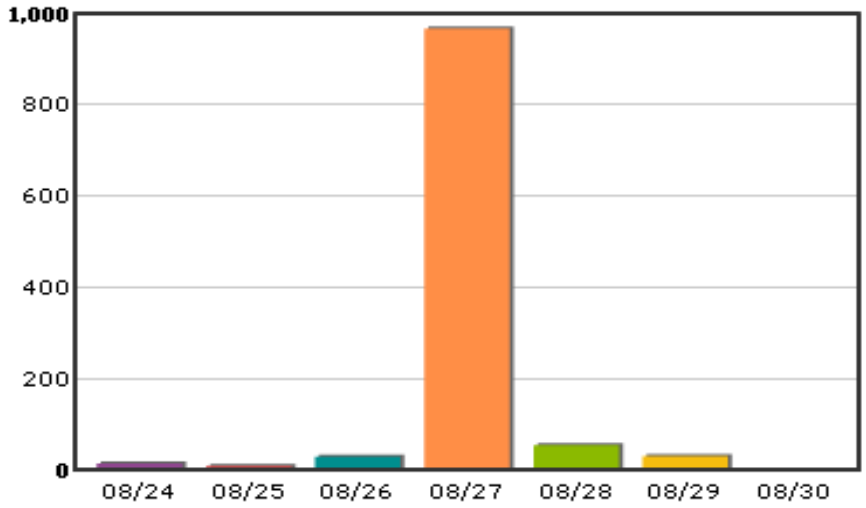
All videos of the talks are available from http://www.vimeo.com/album/131757.

b. Event statistics

This event was smaller than the last Public Sphere, which was on Government 2.0. We did not have a lot of cross-over of audience, although there was some cross-over. It was great to have a lot of new faces to Public Sphere, and to have groups like Silicon Beach put together papers for this Public Sphere to contribute to the outcomes in a really meaningful way.

- 100 physical attendees to Public Sphere Camp, including 21 speakers
- By the end of the event there were 151 people Tweeting, with 1100 tweets,
- Around 519 individuals visited the "Live wall" (which aggregated the Twitter, Flickr & liveblogging feeds).
- There were almost 400 Zing comments by the end of the day from Brisbane, Wollongong and Melbourne
- James Dellow did Live Blogging throughout the day, which also drew a further 212 comments plus James' 282 comment effort
- There were people from remote, regional and metro Australian locations and also from overseas watching the video and Twitter stream and actively participating during the day. There were people participating in-person at the main event in Wollongong, and at both of the remote nodes in Melbourne and Brisbane. Countries participating included Australia, New Zealand, the US, UK and Canada as well as some from India, Germany, Malaysia and China.
- Additionally, there were another 60 contributors who wrote the Silicon Beach Lifeguard Paper for the consultation - http://www.siliconbeachaustralia.org/lifeguard/

Twitter statistics from the day

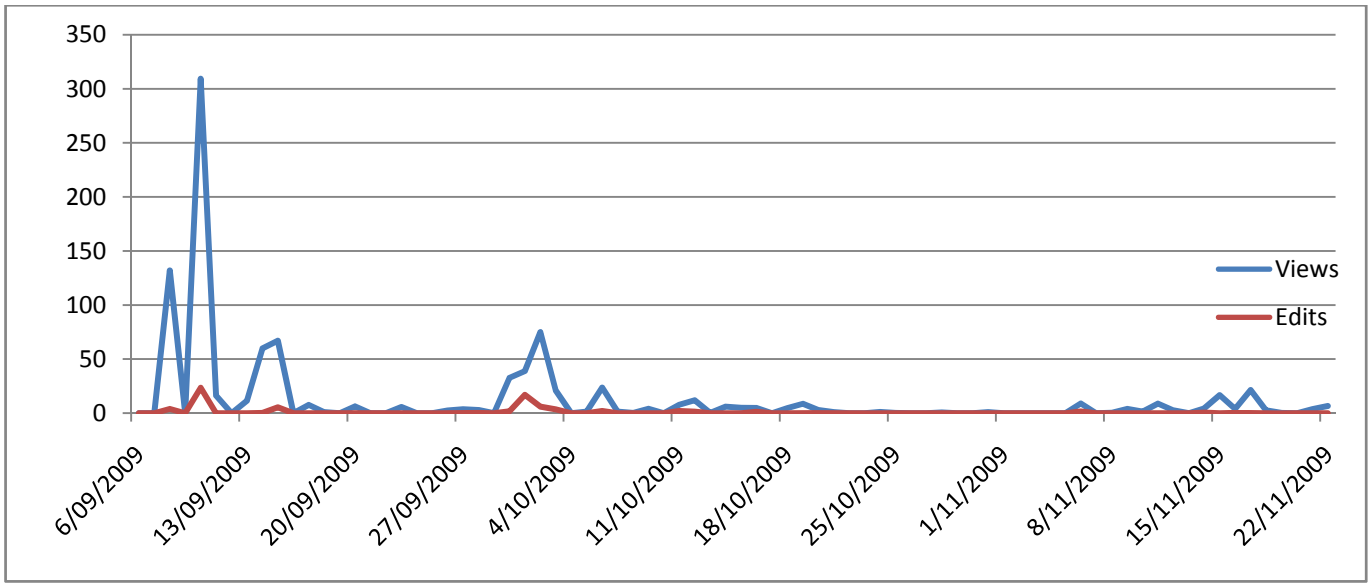


c. Briefing paper statistics

- Created by the office of Senator Kate Lundy – Edited by Pia Waugh, Kate Lundy
- 22 community contributors, contributing over 7000 words
- 120 individual wiki page edits
- 14,161 words in final document
- Final PDF to include additional items:
  - Graph of wiki statistics
  - Photos from the day
  - Graphs from Twitter

Wiki Statistics

There were in total (as of the publishing of this briefing paper) 1677 page views of the briefing paper, and 120 individual page edits.



Wiki Wordle

http://www.wordle.net/show/wrdl/1373706/Public_Sphere_3%3A_ICT_and_Creative_Industry_development

d. Public Sphere Outcomes

The briefing paper has been collated from ideas put forward in:

- the talks, blog posts and comments linked on the Public Sphere #2 - Government 2.0 page
- the community liveblogging on the day by James Dellow which itself drew 212 comments plus James' 282 comment effort. Thanks James!
- the Silicon Beach Lifeguard paper created for this Public Sphere discussion. This has been heavily drawn on. The Silicon Beach Lifeguard paper was put together for this Public Sphere and it includes the combined ideas from at least 60 people, along with feedback from hundreds on the mailing list. The Silicon Beach mailing list is made up of ICT industry entrepreneurs who aim to "to foster the growth of Australian technology companies". As such this paper was a great starting point for further discussions.
- the transcription of the #publicsphere tag for the week including the event. The transcription of the #publicsphere tag for that week shows over 1100 Tweets and 151 contributors. The value of contributions was quite high with a lot of external links and value discussions around the topic area. We had a lot less Tweets than the previous Public Sphere event largely due to a large number of the in person discussion outcomes being put into Zing.
- the in person discussions from Melbourne, and from Brisbane & Wollongong. Zing was used to facilitate the in person discussions. The reason for the split was an unexpected lack of wireless internet access in Melbourne for some of the day. Each person who commented in Zing was the scribe for a group of 7 to 9 participants (except for Brisbane who did it as one user for everyone). It worked reasonably well, and we anticipate further expanding either the same or similar technology for use by in person and remote attendees at the next Public Sphere. A big thanks to Donna Benjamin from Creative Contingencies for her assistance with Zing. There were almost 400 Zing comments by the end of the day from all three locations.
- There were and continue to be more comments added to the website along with additional external links.
- #publicsphere made number 1 Australian Twitter hashtag for the day.
- all the Public Sphere 3 data was also put into an interactive analysis tool by Palantir, which is useful for people to look at.

The briefing paper was handed over to Minister Carr for his office and department on the 30th November 2009.

e. Public Sphere process

The Public Sphere event is just part of the process, and people were encouraged to express their thoughts and ideas to the main Public Sphere 3 website, and directly to the briefing paper which was published on a wiki, open for anyone to contribute. This wiki was open for just over two months. This final briefing paper contributes to the Information Technology Industry Innovation Council, an initiative by Minister Carr, the Minister for Innovation, Industry, Science and Research.

Throughout the entire Public Sphere process, interested parties and organisations are kept up to date of the progress and how they can contribute to the process. The full Public Sphere process is as follows:

1. Topic preparation – the topic is decided upon, and the appropriate portfolio Minister is fully briefed of the project beforehand. Then we engaged with appropriate community and industry bodies (Silicon Beach, AIIA, ACS, OSIA) to let them know what we were doing so they could start preparing input, and also assist with feedback on the Public Sphere progress.
2. Topic launch – the Public Sphere topic is blogged and open for comments and input, the community is asked for feedback, for talk submissions and for submissions. This generates interest, starts the conversation online, and starts the collation of useful ideas, recommendations and submissions.
3. Public Sphere Camp – after the topic has been live for a month of so, there is an event which pulls together presentations and focused discussion on the topic to pull together the community thoughts, peer review, and policy recommendations. The event is fully recorded, both by video, and through social media and collaboration tools, which is all made available online.
4. Post event collaboration and contributions – Any last contributions people want to make after the event such as blog posts, links, evidence and case studies are posted to the comments of the Public Sphere on ICT & Creative Industry development to be included in the briefing paper. The initial briefing paper draft is published online in an open wiki, that anyone can view, and then register to edit. This maintains a level of accountability of who has contributed what, and also opens up the drafting process to be highly collaborative. The wiki includes ideas, responses, evidence and recommendations from this Public Sphere topic. It draws on all comments, Tweets (#publicsphere), papers, tabled discussions, talks and blogs posts from above and that people link to in the comments. It includes three parts:
    - 1) The topics discussed
    - 2) Recommendations made, and
    - 3) Statistics and information about the Public Sphere itself.
5. Handover to the Information Technology Industry Innovation Council – Senator Kate Lundy will hand over the finalised briefing paper to Minister Carr's office to put to the Council, and they are looking forward to seeing the briefing paper.

f. Sponsors

The sponsors for this Public Sphere were:

- The University of Wollongong & the associated Innovation Campus (iC)
- NICTA & the NICTA OpinionWatch project – which will be used for Public Sphere theme and sentiment analysis, and will be showcased at the Canberra Techfest Sept 8th
- Trinity College – The University of Melbourne – who provided exceptional support and assistance given the short notice they were given as our original Melbourne venue fell through with a weeks notice.

g. Final thanks

Many thanks to all those who have already contributed, and especially to the volunteers who are helping to make the event happen. In particular our thanks to:

- From Wollongong: James Dellow and all the staff at the Innovation Centre
- From Brisbane: Steve Dalton, Des Walsh, Professor Brian Fitzgerald, Paul O'Keefe

- From Melbourne: Donna Benjamin, Christopher Hire – Donna & Chris had an exceptional challenge due to technical issues on the day, and we are very thankful for their perseverance in getting great outcomes in spite of the issues! Thanks also to Trinity College.
- From NICTA: Liz Jakubowski, Phil Robertson, Jonathan Gray, Terry Caelli, Barbara Duncan, Max Vit, Issam Ibrahim, Matt Hope & Clinton Buhse

3. Lessons learned

a. Technology

A full dress rehearsal must be done in advance! In between the change of the Melbourne venue with a weeks notice, and the various people doing their own little tests without all testing together, we ended up with a few technical issues on the day. Next time we will use LiveStream.com for all remote locations and use the dashboard in that app to seamlessly switch inputs which will be much better and will assist us in managing the sound/video better on the day. This means future Public Sphere's won't have as much schedule shuffling as this event had to have.

We are also looking to use an integrated iteration Zing and Twitter, and to make the Zing collaboration more transparent and participatory. It worked well for the in room discussions - particularly to keep people focused and contributing constructively whereas Twitter encourages a lot of retweeting and repeating rather than actual ideas - but on the day Zing was a barrier for remote participants. Thanks to Donna and Peter who are working on this!

b. Participation

As is sometimes brought up, there was some concern that Public Sphere being largely online may not be inclusive enough. The Public Sphere had three physical locations for people to participate in person, and interested parties could email, phone or send a letter to our offices to contribute to the topic. We are however continually looking for new ways to make the model more accessible and inclusive of all interested parties wherever they are and whatever skills and resources they possess.

4. Publicity

We put out several blogs, press releases, and had some good coverage of the Public Sphere after the event. We also extended invitations to various politicians, experts and community groups relevant to the ICT and Creative industries.

The Twitter community in particular were instrumental in helping promote this Public Sphere by retweeting the website links and inviting new people (politicians, experts and the broader community both in Australia and internationally).

News media coverage:

- Lundy's Public Sphere targets ICT sector development - ITWire
- Wollongong hosts forum on ICT and creative industries – UoW

- Govt opens up to participatory ICT – Canberra Times

5. Photos from Public Sphere Camp

- #QLDSphere image - http://www.meetup.com/barcampqld/calendar/10947834/
- Pia retweeting - http://www.flickr.com/photos/jdubflickr/3863224555/
- View from iC - http://www.flickr.com/photos/jdubflickr/3863224545/in/photostream/
- Donna Benjamin - http://www.flickr.com/photos/kattekrab/3913994336/
- Silicon Beach screenshot – office of Senator Lundy

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