Professor Jeff Jones, CEO *Australasian CRC for Interaction Design*

Strategic Design and Multidisciplinary Research and Innovation

Recommendations

1. Methods and processes for interdisciplinary collaborative partnerships between universities and industry need to be better understood by government
2. Creativity should be understood as a key part of traditional scientific contexts as well as new and emerging interdisciplinary contexts
3. *Strategic Design* should be placed at the centre of the government's innovation frameworks in order to ensure that end-user relationships are fostered within research and development initiatives.
4. Creative arts and design practice should be endorsed as valid research methodologies in order to ensure a comprehensive stakeholder engagement framework across all elements of the innovation system.
5. A system of peer review for non-text based research and development outputs should be implemented.
6. The Australian innovation system should place an emphasis on user-led innovation.

Overview

Creativity sits at the heart of innovation. This has been the case from the earliest use of tools. At the centre of creative tool-making are the principles of good design; and good designers are expert at interpreting and integrating the complexities of real-world problems. With the increasing intricacy of national priorities, scientific discovery and engineering, it's more important than ever before to design strategic processes into our science and innovation plans—right from the start and at every level

This should not de-emphasise the importance of strong disciplines, but assert that integrative, interdisciplinary frameworks are equally important. In particular, an integrative framework like *strategic* design allows science and research initiatives to have a built-in innovation guarantee, because it provides a mechanism for thinking about real-world needs at the same time as it provides a mechanism for thinking across disciplinary boundaries and integrating the idiosyncrasies of creative thinkers.

There is a lot that science can borrow from art, design and the social sciences. In *transdisciplinary* research, the point is not just application of given methodologies but also *implication*—a result of imagining entirely new possibilities for what disciplines can do. A science and innovation plan that utilises strengths across disciplines and makes them key to our science and technology initiatives will make Australia a leader in innovation. The term 'transdisciplinary' refers to a specific form of interdisciplinary practice in which boundaries between and beyond disciplines are transcended and knowledge and perspectives from different scientific disciplines as well as non-scientific sources are integrated. It originates from the demand for research to meet the challenges

of an increasingly complex society. In this context, 'transdisciplinary' has accrued additional meaning, referring to a new way of learning and problem solving involving co-operation among different parts of society in order to meet complex challenges. Solutions are devised in collaboration with multiple stakeholders. Through mutual learning, the knowledge of all participants is enhanced (Klein, et al.).

The creativity of the Australian people is our cultural capital. Fostering it will not only bring wealth in terms of cultural richness and a strong sense of national identity but also in terms of a burgeoning economy. A recent PMSEIC report agreed that Government should value, invest in and foster the emergence of a truly creative economy.

Key Points

- ✓ An innovation system will benefit from framing science and research in that same ways that include and acknowledge the end-users and creative processes.
- ✓ An integrative framework like strategic design allows science and research initiatives to have a built-in innovation guarantee because it provides a mechanism for thinking about real-world needs at the same time as it provide a mechanism for thinking across disciplinary boundaries.
- ✓ Information technology now plays a critical role in the formation and ongoing competitiveness of clusters of creative activity and should be further enhanced by strategic design principles.
- ✓ Strategic design provides the framework for formulating independent research questions as a response to market and user demands, even providing new ways of managing people and organisations.

International Context

According to Mihaly Csikszentmihalyi in his 1996 book, *Creativity : Flow and the Psychology of Discovery and Invention*, creativity is generally associated with art and literature, but it is also an essential part of innovation and invention. He argues that creativity and culture are equally important in professions such as business, economics, architecture, industrial design, science and engineering. This thinking is now widely considered to be an inalienable part of sustainable economic development. In a talk early last year, Sheldon Shaeffer, the director of UNESCO's Regional Bureau for Education in Asia and the Pacific, stated that "[t]he challenge for governments is how to use creativity and cultural industries as a comprehensive strategy…as an engine for local economic development." Other nations have acknowledged the importance of this idea, building it into policies and programs and leading the way to stronger economies. The question is not about the importance of innovation—on that all agree—it is, rather, on how to go about fostering innovation.

For example, in the US there is a push to emphasise hybrid structures and transdisciplinary approaches to research. In a 2003 report, *Beyond Productivity:*

Information Technology, Innovation and Creativity, the US National Science Foundation identified distinctive new institutional structures that have appeared recently, which combine studio or atelier creation with research-oriented knowledge production in educational, cultural, scientific, and business contexts. They found that all these institutional contexts attempt to balance and support a variety of interests simultaneously. The shifting roles individuals play both alone and in teams in such settings—as artist, designer, researcher, theoretician, entrepreneur, or technician—has led to hybridity. The committee undertaking the report found that the artefacts they considered best exemplified the intersections of IT and creative practice and tended not to be material objects but rather processes (e.g., interactive works) with social and material aspects. These artefacts were able to 'span boundaries' and could be understood in different ways depending on context (Chapter 5).

In the European Union, the recently released Kok report assesses the EU's progress towards creating the world's most competitive knowledge-driven economy by 2010. The philosophy behind this economic development plan asserts that Europe's future lies in innovation. Their approach in an economy where competitors have more natural resources and lower production costs is "to know more and be better" (Rehn). The EU's strategy is to transform Europe into a knowledge economy.

National Context

Australia is similarly pursuing a strong innovation plan with an emphasis on collaboration. Senator The Hon Julie Bishop launched the NCRIS Roadmap on 28 February 2006. It identifies areas in which Australia should aim to develop, or further develop, research capability through significant infrastructure investment. A major component of this is the collaboration platform for the various initiatives identified in the strategy.

The NCRIS Roadmap calls for enhanced development of the Information and Communications Technology (ICT) industries and confirms that collaboration between experts will be a key component of its implementation and its success. ICT should be thought of as an economic foundation (like roads)—not simply as a vehicle for economic growth, but as an infrastructure in and of itself. This foundation doesn't replace but is 'under-girded' by industries that are already strong and thriving in the Australian economy—agriculture, construction, biomedicine, ecological sciences—and, in turn, supports them in improved ways. The Roadmap correctly aims for system-wide investment rather than on a discipline-by-discipline basis. It also correctly emphasises the need for content management services and "an enhanced capacity to rapidly access, draw together, collaboratively consider and interpret information from multiple sources."

This strategy is in line with other government reports. Last year, Australia's education ministers indicated in their Joint Statement on Education and Training in the Information Economy that "[t]he everyday use of information and

communications technology will transform education and training, and lay a foundation for our future economic and social prosperity". With our unique distance problems, however, in order to remain competitive, we require some socially-oriented, creative ways of managing the connections our citizens and researchers have to each other. Information technology now plays a critical role in the formation and ongoing competitiveness of clusters of creative activity—both geographic clusters and more distributed clusters held together by electronic interconnection and interaction—and should be further enhanced. Design can be used to manage the complexity of needs and provide a quality assurance framework that keeps the end-user experience at the forefront.

The Role of Strategic Design

Australia, like other energetic governments of the OECD, has embraced the idea that, to remain competitive, it is necessary to foster innovation that incorporates culture, creativity and design. Initially, this was seen as a strategic way of harvesting the innovative capacity of the arts, entertainment and creative sectors of their economies. But design is now considered to be an intrinsic part of innovations in all research fields, deriving from both science and art sectors and demanding a range of practical competencies, including anthropology, sociology, psychology, history and engineering. The implications of this are significant. Contributions from arts and social sciences are now being integrated with science and technology. In particular, a perspective called 'strategic design' has emerged with industry and universities world wide. Strategic design provides the framework for formulating independent research questions as a response to market and user demands, it even provides new ways of managing people and organisations.

Strategic design correctly identifies a need to ensure that research is grounded in real user needs. This is both to ensure 'market-readiness' for exploitation, and because considering user needs early in the research and development process can provide early identification of new and innovative opportunities. This is now accepted in global commercial and research environments as a part of best practice that leads to the development of better products and services and the identification of new opportunities.

As mentioned above, the importance of strong disciplines remains, but equally important are integrative frameworks. One should not be sacrificed for the other. An integrative framework like strategic design allows science and research initiatives to have a built-in innovation guarantee because it provides a mechanism for thinking about real-world needs at the same time as it provide a mechanism for thinking across disciplinary boundaries.

Strategic Design in the Innovation Economy

Innovation is not just invention – it involves the development of products and services that have a social purpose and importance. Designing research problems means taking account of stakeholders' increasing requirements and awareness as well as access to an enhanced participation in line with these requirements.

Current approaches to research and development tend to position studies of 'users' and 'stakeholders' in a way which is subservient to a given context or research problem. Much of the discussion on innovation in research methods still amounts to strategies for data collection to add knowledge of 'extant ways of doing things' to existing concepts. While these are important and exciting data collection techniques, they do not guarantee innovation in their own right.

Strategic design approaches are distinguished by a capacity to understand and formulate design concepts as *interventions* that *make a difference.* This involves a focus on two discrete interconnected areas of activity - *relationships based on engagement with research problems, and relationships pertaining to the broader social and cultural participation the engagement affords.*

This approach requires the development of a provisional framework or theory about the mechanisms and processes through which problems can be solved. The design concept itself, then, must evolve out of a rigorous and systematic examination of these mechanisms and processes. It is thus purposively developed and proposed as a *theory* of the way the application would function to enhance participation in research problem solving. This is then the reference point for inductive and pro-active research strategies deliberately designed to 'make trouble' for the theory, to challenge it, refine it, and reach a clearer idea of the conditions under which it is most likely to promote a solution. This process can also lead to the abandonment of an initial theory and to the proposal of a more appropriate one. Thus research is strategically designed to succeed.

In line with this approach, a key focus of the work is the initial development of *conceptual tools* through which to develop a provisional strategically design research proposal. The conceptual tools involve the development of a conceptual grid that locates a research problem for the stakeholders in the context of the relationships that are likely to influence both user engagement and the capacity of the research solution to be effective. A sample conceptual grid would include the examination of stakeholder relationships on the basis of spatial, social, technical and temporal dimensions.

A strong science plan will benefit from framing science and research in the same ways that include and acknowledge the creative process that is part of the arts and design, and the insights into human behaviour that are found in the arts, design and social sciences. To exclude these other disciplines from an innovation plan is to take a step backwards to a time when engineers were the ones deciding which products we needed and how they should be developed.

Design sits at the centre of a strong innovation system, where the arts, the social sciences and the sciences intersect. Each has an important contribution to make to the development and strengthening of an innovation-driven economy.

Current Key Issues for Innovation Systems
The current R&D model segregates scientific knowledge from other forms, tending to focus on the physical and biological sciences, including engineering, while excluding the social sciences, the arts and the humanities, along with science education and even scientific and technology services.

Barriers to successful collaboration - Australia's unique situation
In the Australian context, critical mass is a key success factor for any industry. Our low population base and Australia's distance from other industrialized nations pose particular and distinct problems. Without cross-sectional, multi-disciplinary, and multi-institutional collaboration, critical mass cannot be achieved. In a global environment that focuses on the creative industries, we can harness the contributions of designers and artists, who bring a unique understanding of the social side of collaboration, and who suggest new perspectives into the development of collaboration tools and methods. It is these sorts of contributions that will help Australia master the tyranny of distance (without de-emphasizing other important economic and social initiatives in the process). And then there's the 'attitude' side of collaboration – without the capacity to share risks and responsibilities we are doomed. In other countries – like Canada and Sweden – industry, government and universities seem able to share and managed risks associated with R&D, while here R&D remains somewhat politicized in many ways.

Lack of follow-through (Innovation process value chain)
On the business side there is a need for more capacity and general interest in follow-through. We need more capacity and more money, but even with the influx of cash, we still don't have enough capacity (ie maturity in capital markets) to evaluate, follow through and scale known opportunities and talent. We are too risk averse to take advantage of the small scale opportunities we currently have available to us. Property, mining and natural resources will eventually become scarce and we will be forced to look to human capital to fill the economic gaps.

A design perspective can help formulate 'next steps' more clearly.

Immediacy
One thing we can do immediately is to acknowledge more dynamic insights into the understanding of knowledge relationships and knowledge transfer. First we might consider a system for annotating and peer reviewing temporal based research outputs. Potential stakeholders are ARC's proposed Panel 12 (the Assessment Panel Working Group) for the reviewing of 'creative work' and government assessment bodies such as the Australia Council. Urban planning bodies might also be able to improve stakeholder management processes through more dynamic knowledge transfer procedures. Most traditional science and engineering disciplines are now recognising a need to formalise creative inputs and outputs as a form of knowledge transfer.

Of crucial significance is a need to exemplify alternate **knowledge transfer** processes. Knowledge transfer involves the shift from knowledge embedded within a particular cultural context to a new context. This will necessitate new relationships. Its impact will be evaluated by the new relationships associated with this shift. Knowledge transfer can be defined by three themes intricately entwined:

- *Embedded knowledge:* new discovery inextricably linked to presentation
- *Knowledge Impact:* engagement, knowledge diffusion, modelling, communication
- *Knowledge relationships:* collaboration, stakeholders, intellectual property, copyright.

Knowledge transfer occurs within similar discipline groups (the influence of painting on design) or can be interdisciplinary such as technological innovation and the creative arts. However it is being defined currently as having particular sort of commercial value. Education Minister Julie Bishop (6/6/06) defines knowledge transfer as having "quantifiable economic benefit for the community". The implications are that the Australian innovation system must be able to recognise and capitalise all forms of human potential. Property, easily 'protectable' intellectual property and natural resources are not enough for long term viability. Know-how and intellectual capital must make their way into the mainstream of commercial thinking in Australia.

Resolving impediments to the innovation system

Integration

Australia, like other energetic governments of the OECD, must embrace the idea that, to remain competitive, it is necessary to foster innovation that incorporates culture, creativity and design. Initially, this was seen as a strategic way of harvesting the innovative capacity of the arts, entertainment and creative sectors of their economies. But design is now considered to be an intrinsic part of innovations in all research fields, deriving from both science and art sectors and demanding a range of practical competencies, including anthropology, sociology, psychology, history and engineering. The implications of this are significant. Contributions from arts and social sciences are now being integrated with science and technology. For designing interactions in collaborative platforms and for the user-interfaces required of collaboration tools, this type of integration is critical. To master distance we need better tools, better social networks, better ways of understanding how social networks work and better access to travel opportunities and showcases (trade shows, etc…)

Collaboration

Developing effective collaboration models are one way to focus on a full range of technological, social, creative, business and structural perspectives. There are a lot of computer scientists developing collaboration tools that function, but not many of these scientists work on the user interfaces, protocols, governance and relationship-building in these online environments. We have much work to do yet to make the tools really useful for people and to develop groups of people that function

as 'virtual' organisations. Art and design raise important new questions for information technology (including collaboration platforms) and help to push forward research and product development agendas in all areas of scientific and technological innovation. The key to this type of collaboration is twofold. First, it needs to be outcome driven; and second, collaboration platforms need to focus on user interfaces. This means that the design component involved in the interactions between people in outcome-driven teams becomes all important. Importantly, the design component produces the value-add, but it is very intangible.

This idea is supported by a recent report undertaken by the Prime Minister's Science, Engineering and Innovation Council (PMSEIC), which identified both design and the creative process as research methods as well as key elements in getting effective connections between people in online communities. Interestingly, the management of social relationships is an inherent aspect of design and artistic processes, and when we bring the high-tech capabilities of online environments together with business methods, organisational development expertise and the design methodology mentioned here, we become much more capable of implementing 'virtual' organisations that function as effectively as organisations based in real places. Information technology already supports the formation of non-geographic clusters of creative activity. In the past, such clusters depended heavily on geographic proximity for the intense face-to-face interaction and high-volume information transfer that they required. But with the focus on building collaborative platforms through strenuous ICT investment, as proposed in the NCRIS Roadmap, it means that Australian researchers, situated indifferent institutions and across different disciplines, will be able to share information quickly and effectively – in 'real-time' – an important first step in creating critical mass.

Of course, we will always have the need for face-to-face meetings and personal working relationships, but we can improve the ways in which these activities are supported by developing appropriately designed user interfaces and repositories. According to the 2003 NSF report, *Beyond Productivity: Information Technology, Innovation and Creativity*, the design of better human-machine interfaces is crucial in supporting interactions between people and institutions using collaboration platforms. The report concludes that such improved interfaces cannot be accomplished without strong consideration of the "quality of experience, meaningfulness, personal values, identity, and appropriateness to social and cultural contexts" involved in all human interactions.

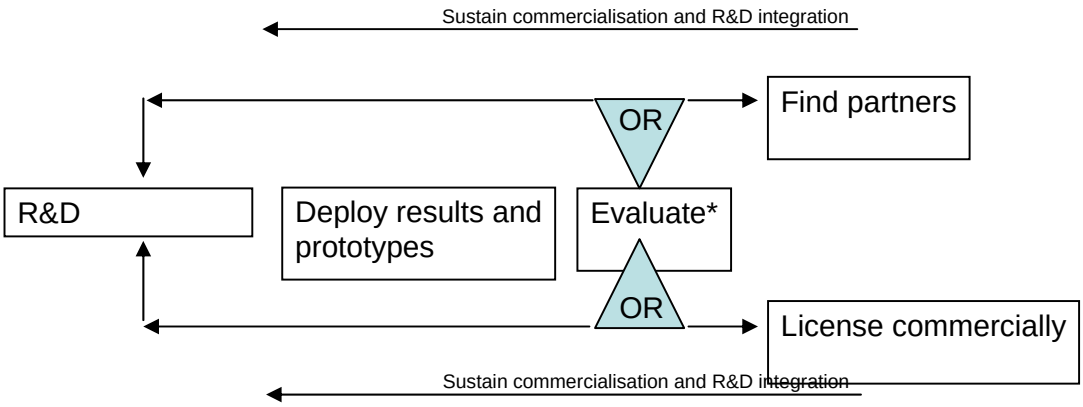
World's Best Practice - Experience Design and Strategic Design

Experience design puts people at the centre of scientific and technological innovation. This goes beyond being user-driven and user-focused. Experience design relies on the notion that if the experience of using new technologies (for example) is positive, people will be encouraged to adopt them, adapt them, and participate in their evolution.

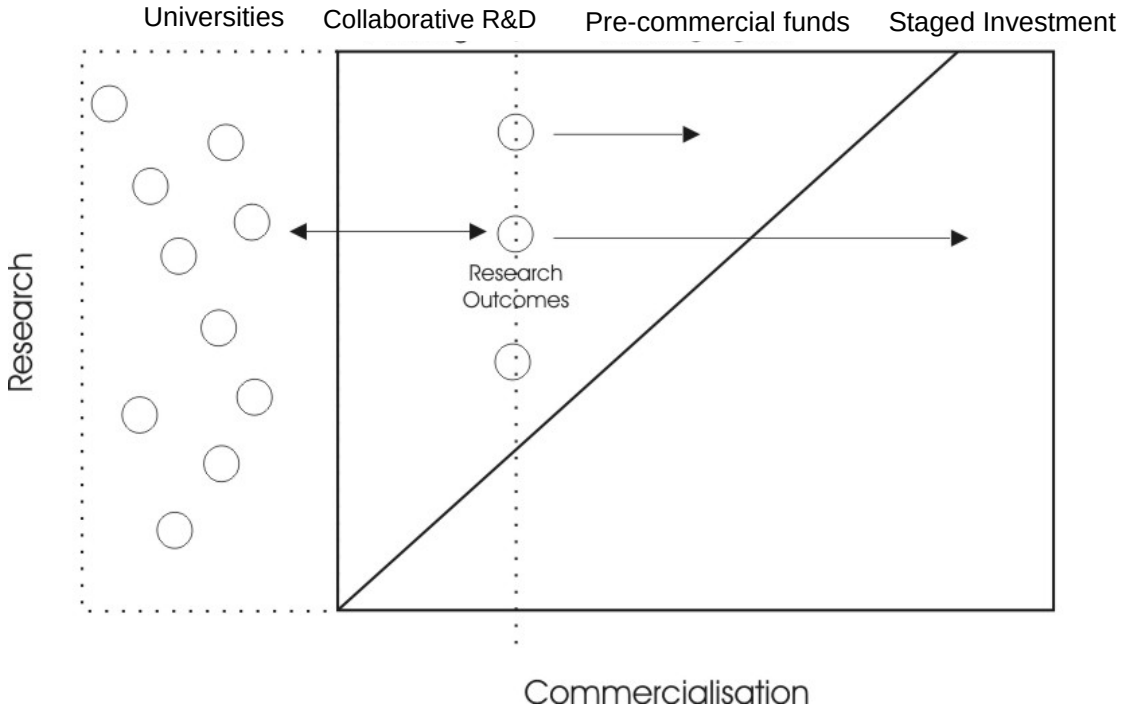
The games industry knows this. Games are social, multi-player, multi-platform experiences. Big industry players are holding back while social scientists figure out how to inform game design processes so that they can make creative games. Games industry understanding is fuelling many different industries—education, defense, eLearning, health, rapid prototyping for manufacturing, etc… The US defence department recently funded an Institute for Creative Technologies in California because they saw game industry innovators solving their technical and business process problem more quickly than their well trained scientists.

Interestingly, game developers are very much in touch with their customers and thrive on customer interaction for innovative new product ideas.

Experience design and strategic design also lead us to more refined frameworks for understanding and deploying innovation. For example, the following diagram provides an overview of how a design process might be applied as an ongoing research and innovation framework:



It might also become important to think about research and innovation in terms of more sophisticated value-chain relationships. The following diagram emphasises value-chain distinctions although the hard lines are actually grey areas:



In this diagram the Collaborative R&D band is a key component that can be supported by government. The latter bands of development and commercialisation will become better understood and accepted by our risk-adverse economy through the understanding of the stakeholder engagement that strategic design approaches will bring to research initiatives.

Positioning

Australia is a potential midpoint between American and European sensibilities. We are also early adopters of new technologies. We can use our low population to our advantage by thinking of our country as a laboratory of sorts – if we get it right here, it won't be so hard to get it right elsewhere. And the multicultural composition of the Australian population will also serve us well. The formation of existing design-based initiatives have been important first steps, allowing for collaboration between institutions in Asia, Australia and New Zealand and focusing on interaction and user-centred issues. However, there isn't much activity in this area as of yet.

The next step is to take collaboration global, focusing first on the Asia-Pacific region, and then to shift the focus from interaction design to experience design. Australia maybe be poised like no other economy with an innovation system that thinks strategically about design —how it is approached, what it accomplishes, and how it is brought into the new creative economy. Most importantly, by incorporating strategic design principles as intrinsic to its innovation system, Australia is set to create an economy based on understanding, meeting stakeholders needs and utilising creative capital much more effectively.

Contributors

Jeff Jones, Sam Bucolo, Barbara Adkins, Richard Vella, Laurene Vaughn, Deb Polson, Jacqueline Adair Jones

References:

The Assessment Panels Working Group *Outcomes from RQF EAG Working Group 2: Assessment Panels (*14/11/05). Retrieved July 10 2006 from the World Wide Web. http://66.102.7.104/search?q=cache:qXUQLXgBvtYJ:www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_issues/research_quality_framework/documents/rqf_preferred_model/assessment_pdf.htm+Panel+12,+RQF&hl=en&gl=au&ct=clnk&cd=1&ie=UTF-8

Bishop, Julie. (2006) *Knowledge Transfer and Engagement Forum*, Keynote Address, retrieved July 13 2006, from the World Wide Web, http://www.dest.gov.au/Ministers/Media/Bishop/2006/06/b001160606.asp

Csikszentmihalyi, Mihaly (1996). *Creativity : Flow and the Psychology of Discovery and Invention*. New York: Harper Perennial.

High Level Group chaired by Wim Kok (2004) *Facing the Challenge: The Lisbon Strategy for Growth and Employment*. Retrieved August 10 2006 from the World Wide Web, http://ec.europa.eu/growthandjobs/pdf/kok_report_en.pdf

Klein, J., Grossenbacher-Mansuy, W., Häberli, R., Bill, A., Scholz, R.W. en Welti, M. (eds.) (2001) *Transdisciplinarity: Joint Problem-Solving among science, technology and society. An effective way of managing complexity.* Basel: Birkhauser Verlag.

National Collaborative Research Infrastructure Strategy Roadmap (2006). Canberra: Department of Education, Science and Training.

Mitchell, William J., Alan S. Inouye, and Marjory S. Blumenthal (*eds.) (2003) Beyond Productivity: Information Technology, Innovation and Creativity*. Washington: The National Academies Press.

Prime Minister's Science, Engineering and Innovation Council (PMSEIC) Working Group (PMSEIC) (2005). *Creativity in the Innovation Economy*. Canberra: Department of Education, Science and Training.

Rehn. (06 July 2006) "Europe needs innovation – but innovation also needs Europe." (English Translation) Potocnik article published in Finnish newspaper Kauppalehti. Retrieved August 9 2006 from the World Wide Web, http://ec.europa.eu/commission_barroso/rehn/speeches/pdf/060706_rehn-potocnik_post.pdf

UK Department of Trade and Industry, government response to creative industries forum on intellectual property, retrieved August 10 2006 from the World Wide Web, http://www.culture.gov.uk/NR/rdonlyres/12017917-F8D5-4CEB-B898-D839BFC90DA7/0/GovernmentResponse_CIF.pdf

Appendix 1- a matrix of support elements for consideration – preliminary suggestions

Generally, an 'Innovation System' should support creativity and creative people across the spectrum of science, technology, arts and design. Australian creatives in both science and art are a resource to be mined over the next 50-100 years. In support of creative people the Australian government should consider a broad range of incentives and support structures that span individual, social, organizational, institutional and cultural boundaries. Since we a small country, we will have to master the tyranny of distance by providing some clever collaboration support systems as well as the aspects of the suggestions provided in the matrix below.

Government should…

Value	individual (and employee/employer) incentives
Endorse	social incentives
Invest in	financial incentives
Encourage	tax incentives
Foster	learning and teaching incentives
Motivate	cultural and cross-organisational incentives

… the emergence of a truly creative economy. Economic and social benefits are higher relative to other sectors and the triple-bottom-line outcomes – social, cultural and economic – make this as much about wealth-creation as well as 'worth-creation.'

Benefits:	Individual	Social	Financial	Tax	Learning	Cultural
Actions:						
Value the creative Economy	Acknowledge the talent base- Creative talent is a factor in global economic competitiveness; Social marketing campaign: 'Imagine Australia'	Catch up-Other countries are investing 'laterally' in creative people	As in sport, foster a society of individuals that know when they have made valuable a contribution	Concessions fo inventors, artists and other individual talent (especially to single individuals following a whim)	Acknowledge that the traditional forms of business and academic development are counter-productive to the personal development required for creatives.	Establish new ways to people to think about supporting and incentivising creative capabilities
Endorse the creative Economy	Creative ideas bank (a virtual	Social marketing campaign: 'Imagine	Creative ideas bank (a virtual	Concessions for in-kind contributions to	Creative ideas bank (a virtual	Creative Collaborations:

	organisation) matching business angel seed funding to people and ideas	Australia'	organisation) - Matching seed funded companies to growth capital; refer to the building to London Indie TV production in the 80s	cross-organizational projects and high risk seed funded projects	organisation) matching business angel seed funding to PG students and their ideas	Establish more interaction between institutions and cultural organisations
Invest in the creative Economy	Social marketing campaign: 'Imagine Australia'	More efficient uses of human capital and material resources.	Creative Collaborations: Establish e funding model that increases interactions between publicly funded institutions	Think very laterally about 'export' and establish R&D concessions	Add Design and creativity to each of the National Priorities	Expand the CRC and ARC programs to better integrate cultural organisations
Encourage the creative Economy	There are negative tax implications for micro businesses putting in-kind into ARC and CRC projects; especially into incorporated ventures	Creative people also tend to be politically and socially motivated; define a tax regime the accounts for individual engagement, philanthropic activity and specific incentives for high net worth individuals living in Australia	Establish a flexible tax regime that accounts for the use of in-kind contributions in all sorts of ventures (but with particular attention to incorporated entities and entities with shareholders and other investors)	Creative Collaborations: Establish a tax incentive model that increases interactions between institutions and small companies	check the tax implications for SMEs putting in-kind into CRC and ARC projects	*Make public organisations (including cultural organizations) more accountable to tax payers.*
Foster the creative Economy	Expand the 'job ready scheme' to include creative design and artist endevours	Find ways for schools and communities to foster creative talents (through the sorts of community programs that result [for example] in sports facilities being built)	Allow CRCs to engage with sectors outside their specific domains through NMHRC and ARC programs and other federal grant programs	Concessions fo inventors, artists and other individual talent (especially to single individuals following a whim)	Design and Creative process: Endorse the use of design and creative processes as a research and development paradigm (like the rest of the modern world)	Make public organisations (including cultural organizations) more accountable through more formal measures of public learning outcomes
Motivate the creative Economy	Value people and ideas in new ways	Make public organisations (including cultural	Refine funding model and incentives for	*Make public organisations (including cultural*	Expand the CRC and ARC programs to better integrate	Find ways of ensuring that cultural orgs 'belong'

		organizations) more accountable through more formal measures of public (learning) outcomes	cultural organizations	*organizations) more accountable to tax payers.*	creative design and artist projects emphasizing collaboration and including cultural organisations	to 'the people'