



National Cloud Computing Strategy

DBCDE DRAFT DISCUSSION PAPER

AllA Response

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INTRODUCTION

The Australian Information Industry Association (AIIA) welcomes the opportunity to provide comment on the draft National Cloud Computing Strategy from the Department of Broadband, Communications and the Digital Economy (DBCDE). At the outset we note a level of uncertainty as to how this latest draft aligns with or supersedes the 2011 Australian Government Information Management Office (AGIMO) cloud strategy for government, given the DBCDE draft also covers government uptake of cloud computing. We would appreciate early clarification on this point.

We would also flag our concern that government does not unwittingly mandate that enterprises must make investment and/or location decisions based on *anything other than genuine commercial factors*. For example, AIIA does not support any move towards a policy which requires all data centres to be located in Australia and/or all data must be stored in-country. At the very least such a policy direction would be contrary to Australia's international treaty obligations. More critically it will do nothing to advance Australia's position as part of the global digital economy, which sees 'business across borders' increasing exponentially in this Asian Century. In any respect it should not be viewed that such a position is in any way mutually exclusive to Australia developing its own robust cloud services industry.

Secondly, standards will play a critical role in ensuring both business and consumer reliance on cloud suppliers. International standards must determine Australia's approach to cloud, and in this regard, any move towards local or regional standards will be opposed by AIIA. This includes any approach towards adopting parochial assurance protocols such as the NZ draft code, which has not been developed by the cloud supplier community and will not be supported by cloud suppliers.

With the global transformation that is currently taking place in many industry sectors due to the disruptive impacts of digital technologies, this is a point in time where Australia needs to actively encourage greater investment by high technology services companies, recognising

the contribution made by those enterprises to such indicators as increased and ‘smarter’ employment, productivity, spin-off business, applications development, growth and exports. A key characteristic of the growing services economy and global online trading is the ability for enterprises to quickly re-locate to more favourable jurisdictions anywhere, thus depriving the former jurisdiction of employment benefits and productivity. This is a modern day reality and one which new policy approaches must keep top of mind when developing and promulgating policy positions.

Enterprises, indeed nations, can no longer thrive in this new global economy by adopting inward-focusing business models or protectionist positions; AIIA members of all sizes are now utilizing the enabling potential of technologies to give themselves a presence online everywhere. Failing to do this undermines their competitiveness in the short term and sustainability over time. Furthermore cloud services are regarded as key to the next wave of business innovation - innovative companies drive functionality enhancements and new service offerings deliver productivity benefits *to all sectors of the Australian economy*.

AIIA

The AIIA is the peak national body representing multinational and domestic suppliers and providers of a wide range of information technology and communications (ICT) products and services. We represent over 400 member organisations nationally, including global brands such as Apple, EMC, Google, HP, IBM, Intel, Microsoft and Oracle; international companies including Telstra; national companies including Data#3, SMS Management and Technology, Technology One and Oakton Limited; and a large number of ICT SME’s. Almost without exception, members have moved or will move many of their activities to the cloud, increasing their efficiencies, effectiveness, and providing a global presence at reduced cost.

GENERAL COMMENTS

Firstly, we note the very tight time frame imposed on the Department in bringing this paper together. We understand too that it is the basis for consultation from which a much more polished document and strategic position will be developed.

As the document currently stands, it fails to live up to the title of being a 'strategy'. While the importance of context is noted, too much of the document focuses on descriptions of current activities rather than outcomes - whether these be aspirational or better still, performance based.

From the outset the document requires a discussion that presents a compelling vision of the role cloud services will play in accelerating Australia's participation, positioning and ultimately, success in the global digital economy. More specifically, it needs to spell out specific goals and objectives - rather than focus as it currently does, on addressing "concerns". There is no sense in the document of *what it is the Government is seeking to achieve*. To this end the paper requires a clear, strong, authoritative positioning statement, around which the details of the strategy are based.

To rally a call to action Australia needs a "Cloud First" statement like the US. Government needs to speak with conviction and show leadership in cloud service adoption. Given, it has millions of touch points with businesses and organisations of all sizes, it is well placed to drive broader adoption across the economy. As AIIA has previously noted, we believe Government's current position towards cloud is overly risk averse and conservative.

Statements that "Australia takes a similar approach to the US" are unhelpful - when in effect, Australia takes a very different approach:

- The US Cloud First policy requires agencies to consider whether cloud is relevant first before acquiring other solutions (focuses on helping agencies go cloud)
- The AGIMO policy essentially require agencies to rule out other solutions before acquiring cloud (focuses on the risks)

We acknowledge that the Cloud First policy similarly requires agencies to weigh up risk and that this remains a major consideration, but the starting position (as articulated above) is fundamentally different. In the US, the default position is to move to cloud.

Given there is currently only a small and emerging cloud market in Australia, industry would welcome a clear statement from the Prime Minister, setting the policy drivers for cloud computing in Australia and its relationship with the National Broadband Network.

There needs to be a much sharper vision of what is required to ensure Australia is not a laggard and does not lose this opportunity to assume a competitive role in, and leveraging on, global cloud services. To this end government needs to make the strategy a catalyst to put its own support and demand for cloud services on the table to establish clarity around the trustworthiness and robustness of cloud services. In other words the strategy must be a platform for Government to literally ‘put its money where its mouth is’. The US administration Cloud First policy may provide a relevant example of how a clearly articulated strategy and working with industry can deliver results.

Rather than the generally descriptive approach that has been adopted the Strategy needs to assume a more authoritative tone that clearly articulate the relevance of cloud services for specific applications in all sectors. The paper reads as somewhat theoretical – to have the gravitas required to catalyze action it needs to draw out examples that support the prominence of cloud services to existing business models and outcomes. It needs to illustrate the actual experiences of early adopters, highlighting real outcomes and benefits achieved. In doing this it needs to contextualise cloud services in terms of being an evolution of existing ICT service provision models - models applicable to the evolution of a global business-operating environment. It needs to be clear that cloud services are not an aberration and that indeed, with the pace of technology development as it is, a likely point in an ongoing continuum. If we fail to seize the opportunity we risk being generationally ‘behind’ our competitors.

The paper needs to move away from the concept of “local cloud”. It needs to distinguish between Australia’s role in participating in and taking up cloud services and the equally important goal of encouraging our own ICT market to be a competitive force in the cloud services global market. We need to be clear that participation is critical but that there is also an opportunity to drive home grown IT industry development.

Cloud computing is essentially “internet computing”, and the internet and the cloud are inherently global by nature. Service providers will seek to provide services everywhere based on infrastructure and systems that are globally distributed. The paper’s concept of a “local cloud” is a misnomer. KPMG’s economic impact report only considered the public cloud as it offered the greatest benefits. There is an extensive body of research (such as the Grattan Institute Game Changers report) which shows that benefit from innovation is from broad adoption of new ideas. For Australia, the benefits from cloud computing come not from creating an artificial distinction between local and non-local players, but from the broad adoption of cloud computing tools by every business across the economy. “Local adoption” is important in terms of economic benefit - not a “local cloud”.

In essence the strategy needs a more positive framing - a plan about how Australian households and businesses can benefit from new technology. It should start by highlighting the opportunity and the economic benefits from cloud adoption. Further, it should focus on evidence-based policy, rather than uptake risks. While Australian consumers are second in the world in terms of mobile penetration (52%) and millions use cloud computing every day through applications like webmail, mobile apps and social networking – Australian businesses and governments have been slow to take up the benefits of cloud computing; this will not improve until government clearly demonstrates it is ‘leading from the front’.

SPECIFIC COMMENTS BY CHAPTER

Consumer Protection

Leading the discussion with consumer protection and effective law sets a negative tone for the rest of the document. If the paper is about vision and harnessing opportunities, then it should start more positively, outlining potential and benefits – not risks and issues. This assumes an inherent level of risk in cloud services - including that these services require an extra special risk mitigation approach.

The paper assumes the need for a ‘special’ regulatory framework. The strategy does not provide any evidence of a public need requiring government regulation. Indeed AIIA believes any regulatory requirements should be grounded in existing standards for service

provision organisations, rather than cloud services being made a special case. While it is appropriate for Government to provide guidance and set the right policy frameworks in areas such as trans-border data flows and jurisdictional issues, from a regulatory perspective, there is no case for treating cloud service providers any differently than other service provision. Although the paper mentions gaps in current arrangements, it does not identify or provide any specific evidence of issues requiring intervention. We should avoid any 'cloud specific' regulatory arrangements.

Cloud computing, and the digital economy, are rapidly developing and dynamic industries - which have consistently proven to be able to adopt market solutions to issues. If the strategy were to find any evidence in future drafts, it should carefully consider the impact of any form of regulation on developing markets, which may seriously impede their future development and ability to implement market solutions. It should comprehensively define any problems it aims to solve.

The NZCS Cloud Code is not an ideal model for cloud computing - several of its requirements clash with the global concept of cloud computing and the internet; it is considered unsuitable by several global cloud providers. All this is to say, that we should be looking to implement an operating framework and environment that meets our business needs and, when it is articulated, the vision that is articulated.

Having said this, data portability is crucial and policy and standards need to ensure data ownership and vendor lock in is prevented. This does not however, need to be addressed through heavy handed regulation. The paper should be exploring other options to achieve the same outcomes.

Promoting uptake

Take up of cloud services will largely rest on evidence of how it can be used, the benefits it delivers and the opportunities it opens up. The Strategy needs to specifically focus on how demonstration of benefit is crucial and how that will be achieved and demonstrated in the context of executing the strategy. To this end the paper needs show thought leadership in

proposing what could be done – by government, by industry and by government and industry in collaboration.

The development of appropriate guidance material is critical - not in terms of highlighting risk but in providing examples of where cloud services have increased an organisation's compliance with privacy and security requirements. Guidance that adequately and accurately balances the practical trade-offs between the status quo and new cloud offerings is necessary to help organisations can make informed decisions – rather than what has been an unhealthy emphasis on risk.

As the paper rightly identifies, “the biggest risk associated with the cloud is not adopting the cloud” (page 11 para 5). This position must be given prominence in the paper and set the tone for the strategic path that the paper commits to into the future.

Local Industry

We understand the intention of separating out a discussion on local industry but caution that it needs to steer clear of any hint of protectionism. The Department might like to consider this discussion being reworked into the cloud uptake chapter.

The concept of “local cloud computing” is unclear and could create an artificial geographical division - all Australian cloud players are automatically global players by virtue of the internet.

In answer to the question what should government do to assist the development of a strong local cloud computing industry, we believe that the government itself needs to put its own weight behind the industry - put its own demands on the table and lead by example.

Some of the language (e.g. “Australian business is also increasingly exposed to international competition in the online environment and the government is supporting local industry not only adapt, but compete well in the global online economy”) could be interpreted as opening up a new area of direct government support for an industry and could be seen as protectionism. Our view is that Australian businesses have a huge amount to gain both from being able to access global Internet/cloud platforms and from being able to supply online

services to customers around the world. Creating an artificial division between local and global providers could undermine the significant gains that will arise from this new area of economic activity online.

Government should also carefully consider the potential trade impact if other countries across Asia take the same approach, and its relationship with the US on important trade issues such as the Trans-Pacific Partnership. We cannot expect to protect and foster our 'local' providers, preventing overseas entry into our market, and hope that Australian businesses will be able to export cloud services to Asia -- without other Asian countries returning the favour and locking out Australian providers.

While we understand Government's preference to support local service providers, a level playing field needs to be maintained if agencies are to maximise the productivity and innovation benefits of cloud services and also ensure that local cloud services providers become competitive on a global stage.

Locally based providers can deliver benefits in areas such as network latency, responsiveness and availability of local support and unambiguous compliance with Australian legal and regulatory requirements but they can lack the scale to fully invest in the functionality and security of services simply because building and operating 24x7 enterprise-grade cloud services is expensive. In short, scale is imperative to maximising the benefits of cloud services.

Notwithstanding there is always a role for government in showcasing innovative local providers of services.

At the end of the day the benefits of cloud services adoption will come from the productivity and innovation advantages for the consuming organisations (and the economy) and from the necessarily local on-the-ground services work associated with implementation, integration, training etc.

Without question government must clarify the application of existing legislation relating to cloud computing, particularly in relation to privacy and data security. This must be done as a matter of priority.

Government

As expressed above, this strategy is an opportunity for government to lead the way with a 'cloud first' strategy like the US.

Under the current AGIMO arrangements, there is extremely slow cloud service uptake within government. This is resulting in missed opportunities for the taxpayer in terms of reduced costs and better access to public services, and missed opportunities for government to capitalise on its touch points with other businesses to drive broader adoption across the economy.

This section of the strategy in particular, focuses on describing activities that have been done rather than putting forward a strategic view of the outcomes that need to be achieved. As it stands, one might falsely assume that Government has done enough. It is incumbent on Government to actually demonstrate examples of its own adoption as a catalyst for driving market take up.

In demonstrating leadership government needs to articulate a clear vision for cloud services in Australia, including specific outcomes that need to be generated to leverage cloud service opportunities and benefits. The government literally needs to practice what it preaches with agencies being tangible examples of cloud users and in parallel working with industry to address broader confidence issues.

Arguably a key barrier to government adoption is the focus on procurement. This is not proving to be an effective strategy to cloud service take-up. As is often the case when it comes to technology adoption the focus must be on business outcomes. At a practical level a more positive framework for assessing the benefits of cloud services is required; early adopters need to be showcased and benefits quantified; agency executives need to be encouraged to exercise more judgment and innovation in the adoption of cloud services - rather than is the current case of being restrained by an overly risk averse culture.

Industry has made it clear that it is prepared to work and collaborate with Government to drive awareness, comfort and take up of cloud services. This can be achieved through

showcasing of business outcomes achieved through cloud services, adoption experiences, issue mitigation experiences and innovation. Government however, must give credibility to industry experience rather than setting itself aside as an exception. The fact that industry lives and breathes in a competitive market, already subject to a raft of standards, compliance and regulatory requirements, must be seen as legitimating it as a viable business operating model that Government can equally leverage.