

AIIA SUMMIT COMMUNIQUE
NAVIGATING BIG DATA
15 March 2013

EXECUTIVE SUMMARY

Navigating Big Data on March 13 brought together more than 200 delegates in person and online to explore the benefits of Big Data and its potential to improve decision-making and deliver more effective analysis to support enhanced government policy making and improved service delivery for consumers, businesses, government and citizens.

The day included plenary sessions with prominent keynote speakers from Intel, Oracle, Adobe, Gartner, AGIMO and the Minister Stephen Conroy, and industry specific sessions examining the role and opportunities of Big Data in the Health, Government and Telecommunications and Media sectors.

The recurrent theme of the Summit was the enormous opportunity Big Data offers in driving efficiency, innovation and evidenced based policy and decision making, across both Government and business. Taking the Big Data agenda forward, issues including skills, governance of data, privacy, purpose and the need to 'ask the right questions' were identified as requiring considered attention.

The Summit culminated in discussion of the issues and actions required to deliver a successful and effective Big Data agenda going forward. The AIIA has taken on responsibility for driving the issue at an industry level and in doing so will act on the recommendations made by Summit participants.

OVERVIEW OF PROCEEDINGS

Navigating Big Data on March 13 brought together more than 200 delegates in person and online, including CIO's and officials from federal agencies, Minister Conroy, industry and business representatives, legal professionals, media and community advocates.

The Summit explored the benefits of Big Data and its potential for delivering better decision-making and more effective analysis to support enhanced government policy making and improved service delivery for consumers, businesses, government and citizens.

While alternate definitions were offered – the consensus position was that Big Data refers to high volumes of a variety of structured and unstructured data that moves and changes at speed, provides deep analytic capability and creates innovative new insights to inform more insightful decision-making. It is characterized by **volume**, **variety** and **velocity**. This extends to additional attributes, **value** and **veracity** where the 'worth' of data (in economic and political terms) and data quality are included. Participants concluded that Big Data capability is about 'the art of the possible' – with the capability of 'smart' technology shifting the paradigm from what was imagination to what is now reality.

The Summit was ably facilitated and led by Intel's Kate Burleigh with key note speakers including Minister Stephen Conroy, Parviz Pereivi (Intel), Andrew

Robertson (Adobe), Ian Bertram (Gartner), Glenn Archer (AGIMO) and Vicky Falconer (Oracle).

A panel of eminent business representatives (Brenton Cooper (DSIC), Conrad Bates (C3) and Greg Wood (SAS)), facilitated by Dr Ian Opperman (CSIRO), addressed the thorny subject of enabling citizen engagement using smart analytics. While a broad ranging discussion highlighted the current and relatively immature utilisation of Big Data in Australia and the enormous opportunity for its practical application across a range of industries, for a variety of purposes.

Industry segments focusing on Health, Government and Telecommunications and Media, each facilitated by industry experts (Paul Cooper (SMS), Kevin Noonan (Ovum), Nick Adamo (E&Y) respectively), considered the challenges and opportunities Big Data presents in a specific industry context. Participants engaged in stimulating break out session discussions, contributing to the presentation later in the day of a summary set of issues and recommendations to drive forward post the Summit event.

A managed media campaign both before and during the Summit resulted in several newspaper articles, radio and television interviews highlighting the potential of Big Data to drive efficiency, innovation and evidenced based policy and decision making, across both Government and business.

Parviz Peiravi called out Singapore's 'Intelligent Country' strategy and Germany's Smart Traffic Management System as exemplars of the practical and 'smart' application of Big Data. Ian Opperman provided the Australian

example of CSIRO's Square Kilometre Array (SKA) initiative and the work CSIRO is doing with the Department of Human Services where Big Data is used to inform risk based management of customers and improve service delivery options. Lia Zalums (Oracle) shared her experience of using Big Data to develop sophisticated personalised medicine approaches.

Not deterred by the challenge, presenters acknowledged both risks and issues to be managed moving forward.

Minister Conroy highlighted the need for appropriate skills to mine the raw data - a theme reinforced by Glen Archer and others who specifically noted the need to urgently 'skill up' data scientists and data analysts to interpret and make sense of Big Data outputs.

Malcolm Crompton, presenting in the Government stream, took a pragmatic approach to the management of privacy in the world of Big Data, reminding participants that nothing comes without risk and that like most issues, knowing, mitigating and managing risk and enforcing sanctions and reparation as appropriate are the foundations for consumer and citizen trust and confidence.

Data governance and management frameworks were noted as imperative to facilitate the appropriate capture and application of Big Data, particularly where data relates to people and populations of people and where data captured today may be put to other purposes in the future. The term data curation was used to emphasis the good 'management' of data. It was agreed

more work is needed, particularly in this area, to build confidence in the capabilities and opportunities offered by Big Data.

Asking the right questions to inform analysis was identified as critical to optimising the potential of Big Data analytics and to legitimatizing the collection and preservation of data.

For many participants, capturing, manipulating and preserving data simply because 'we can' is not reason enough to do 'Big Data'. To be relevant and effective Big Data needs appropriate focus and purpose. To this end, the role of 'people' in the context of Big Data was explored at length with the strong view emerging that it is ultimately the role of humans to ask the right questions and apply the analysis appropriately.

As Government CIO, Glen Archer announced the development of a Government Big Data Strategy with an invitation to industry to respond to the initial issues paper to be released by AGIMO on Friday 15 March.

KEY OUTCOMES AND A CALL TO ACTION

The Summit culminated with the facilitators of the industry stream discussions (Health, Telecommunications and Media, Government) reporting back to the audience challenges, opportunities and recommendations moving forward.

The following provides a summary of these.

- Leveraging the NBN infrastructure together with cloud computing is essential to unlocking the potential of Big Data technology and analytics

across all sectors and businesses of all sizes. Government and business must be educated about the synergies between NBN, cloud computing and Big Data.

- A common language, similar to a data dictionary concept, is necessary to clarify concepts and communications related to Big Data. Vendors, stakeholders, citizens, governments and industry advocates must participate in the conversation on the basis of a shared understanding of concepts.
- Noting the potential need for regulation and/or legislation to facilitate Big Data analytics in the future, light touch regulatory regimes are strongly recommended and only initiated as required.
- In the context of the AGIMO Government Big Data Strategy:
 - Unlocking the value of data will require further efforts on Government Open Data policy as well as cultural and behavioral change. Privacy must not be an excuse to not share data or take the Big Data agenda forward across Government
 - Strong and transparent data governance is critical. Any Big Data strategy must include custodianship principles rather than 'ownership' approaches to data governance. Further, governance frameworks and operations must be business not technology driven.
- The application and use of Big Data must give consideration to appropriate security and privacy protection policies and practices,

especially where data can potentially be contextualized through de-identified data sources.

- In the area of health:
 - The PCEHR as critical to the establishment of repositories of (de-identified) data that can be leveraged to inform evidence based clinical practice and care pathways. To this end, existing legislative barriers need to be addressed.
 - Infrastructure to enable consolidation of genomic and clinical data mashups is urgently required if Big Data techniques are to support ongoing work in the important area of personalized medicine.
 - In the context of realising the potential of Big Data sets, leveraging the PCEHR and its registration process to fast track the feasibility of clinical trials, i.e. to identify if a sufficient cohort is available for testing, should be further investigated.
- In taking the Big Data agenda forward, business and Government were advised to “think big, act small and scale fast”.

In concluding the Summit called for a bi-partisan approach to Big Data policy going forward; we cannot allow *politics* to subsume good *policy* when the opportunity for better policy and decision-making is obvious.

The Summit confirmed that ‘Big Data’ is front and centre on the business agenda – that the attention given to the subject for the day was well justified and time well spent for all involved.

Acknowledging their great foresight, sponsors Intel, Adobe and Oracle were congratulated on their leadership in supporting Big Data as the 'next big thing' on the business and technology horizon.

NEXT STEPS

AllIA will now pursue a comprehensive advocacy program aimed at addressing challenges in the areas of policy, consumer awareness, privacy and governance. The aim is to make a valued contribution to the understanding and acceptance of the huge potential available from Big Data.

This will include further input from global experts who, drawing on their own experience, will provide insight into the Big Data implementation path to success.

In the immediate term AllIA, with the support of members, will drive an industry response to AGIMO's Big Data Strategy issues paper.