



## **Big Data Strategy Issues Paper**

Submission by the Australian Communications Consumer Action Network to the Australian Government Information Management Office

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## **About ACCAN**

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards availability, accessibility and affordability of communications services for all Australians.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will activate its broad and diverse membership base to campaign to get a better deal for all communications consumers.

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# 1. Responses to the AGIMO issues paper

ACCAN appreciates the opportunity to provide comment on AGIMO's draft big data strategy issues paper. We note with approval that the issues paper refers to the possible problems of privacy, security and trust surrounding big data analytics.

The strategy document outlines, in general terms, a number of potential benefits of big data analytics. We caution against pursuing a strategy that relies too heavily on speculations of potential benefit, without any identification of specific benefits that particular implementations of that strategy might offer. Big data analytics have recently received a great deal of public attention, and it is important that Government strategy not be unduly influenced by the 'hype cycle'.<sup>1</sup> Any applications of big data analytics that are perceived to be made without proper analyses of the associated risks and benefits may undermine trust in Government.

Any big data application has the potential to conflict with user expectations about how their data is being used, and risks undermining consumer trust in Government. In particular, big data analytics have the potential to reveal information about an individual that the individual has had no intention of disclosing.

To reduce these risks, any big data implementations must be developed with as open a consultation process as possible, with clear controls on how any data might be used, and with information made available to consumers in an easy to understand form.

## 1.1. Identifying the benefits of big data

While ACCAN recognises that big data has the potential to provide benefits, we note that the benefits identified in the draft issues paper are largely speculative. The draft issues paper refers to the insights that big data analytics 'may provide', the value that analytics 'may produce', and so forth, without identifying specific examples of big data applications yielding such insight and value for governments.

Although such speculative language is no doubt partly due to the use of big data analytics in Government being a relatively new possibility, it is concerning that a strategy with the potential to cause significant consumer harm appears to be based on speculation and the promise of vaguely-defined benefits, rather than concrete evidence.

Any future big data applications must be based on accepted standards of evidence based policy, including the use of quantitative evidence rather than theoretical conjecture.<sup>2</sup>

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<sup>1</sup> See, for example, Barrenechea M, *Big data: big hype?*, Forbes, 4 February 2013, <<http://www.forbes.com/sites/ciocentral/2013/02/04/big-data-big-hype/>>.

<sup>2</sup> Leigh A, *Evidence-based policy: summon the randomistas?*, in Productivity Commission, *Strengthening Evidence Based Policy in the Australian Federation*, Volume 1: Proceedings, Roundtable Proceedings, Productivity Commission, Canberra, 2010, pp 215-226.

## 1.2. Use of social media data

The risks to consumers of big data analytics loom particularly large in the context of social media, which the draft issues paper notes is a potential source of data for Government. While there may be some general awareness that social media presents possible privacy and security risks, big data analytics introduces further risks of which consumers may be unaware.

A notable recent study found that apparently innocuous Facebook ‘Likes’ could reveal, with a high degree of accuracy, a user’s sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender.<sup>3</sup> It is unlikely that users of social media anticipate that their behaviour might be used to statistically predict such information, and any proposed use of social media data should take this point into consideration. Failure to address consumer such concerns is likely to erode trust in government.

## 1.3. Use of cloud data

The possible use of cloud data for big data analytics raises additional challenges to consent that will need to be addressed in any big data applications. From the perspective of an individual user, data sent to a cloud service may not be intended for use in big data analytics, just as data sent by an individual to a social media service may not be intended or expected to be used in Government big data analysis. Further difficulties arise when individuals’ information is passed to a cloud service by an organisation, since the end user may be unaware of the systems the organization uses to store and process that data. Any use of cloud data for big data analysis should, at a minimum, respect principles of data ownership, security, privacy and redress.<sup>4</sup>

## 1.4. Consumer consent and choice

Consumers must have the power to designate which categories of data may be shared with which organisations, and for which purposes. While we recognise that consent may not typically be required for the collection and use of all types of data, we suggest that the possibility of making statistical inferences about individuals using big data methods requires that consent be obtained in a wider range of circumstances. Furthermore, any consent must be informed consent. In the context of big data analytics, informed consent will require providing individuals with some clear and understandable information about the ways in which their data will be used, and recognition of any barriers that may limit individuals’ ability to give informed consent.<sup>5</sup>

We note that in many cases it may be difficult or impossible to obtain such consent. A government agency which purchases bulk data from a social media company, for example, may be unable to ensure that the data it receives has been obtained by the social media company

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<sup>3</sup> Kosinski M, Stillwell D, and Graepel T, *Private traits and attributes are predictable from digital records of human behavior*, forthcoming in Proceedings of the National Academy of Sciences of the United States of America.

<sup>4</sup> ACCAN, *ACCAN position statement: what consumers need from cloud computing*, 2012, <[http://accan.org.au/files/Submissions/FINAL\\_cloud\\_computing\\_position\\_statement.pdf](http://accan.org.au/files/Submissions/FINAL_cloud_computing_position_statement.pdf)>.

<sup>5</sup> ACCAN, *Informed consent research report*, 2009, <[http://accan.org.au/files/Reports/ACCAN\\_Informed\\_Consent.pdf](http://accan.org.au/files/Reports/ACCAN_Informed_Consent.pdf)>.

with consent for the data to be disclosed for that purpose. Informed consent to use data for these purposes cannot be easily inferred from the fact that a consumer has made use of a social media service or cloud service.

## 1.5. Access to and correction of held information

Just as individuals currently have the right to access and correct their personal information held by an organization, there must be a right for individuals to access and correct information generated about them by analytics. This is particularly important given that statistical methods can be used as a basis for differential treatment of individuals,<sup>6</sup> and that these methods have the potential to generate incorrect inferences. Before beginning any big data projects, Government should ensure that it has well-established avenues of redress for consumers.

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<sup>6</sup> Tay L, *Lifting the lid on personalised pricing*, 2 April 2013, iTnews, <<http://www.itnews.com.au/News/337803,lifting-the-lid-on-personalised-pricing.aspx/0>>.