The IEEE Society for the Social Implications of Technology (SSIT) is interested in a variety of issues concerning technology and society, including issues around data availability and use. The Australia Chapter of that Society has compiled a few comments in the hope that they will be of relevance to the Productivity Commission in the course of its public inquiry on Data Availability and Use. Our responses relate to specific questions in the Issues Paper (bolded).

What weight should be given to privacy protection relative to the benefits of greater data availability and use, particularly given the rate of change in the capabilities of technology?

Our primary concern is that this could be the wrong question, and that assessing this requires expertise lying outside the Commission.

Privacy is a complex, essentially contested and often local concept (eg Whitman 2004). It can be described as a foundation for individual autonomy (Rössler 2005) or as a basic human right on its own. As government decisions may be best made in a confidential cabinet process, and as companies protect core confidential information, individuals may flourish best in circumstances in which information about themselves is closely held. Just as there are market efficiencies in book recommendation engines, there will be many who prefer to forgo this in exchange for the ability to read without being tracked or having one's exposure limited by pre-classification.

In a commercial context, this is an individual assessment weighing privacy and convenience (albeit often unthinking). However, the above question suggests that such weighing could be done on people's behalf, despite the complex, culturally specific and contested nature of privacy and the incommensurate nature of the objects being weighed. In other words, the question seems to assume that privacy can be weighed against economic benefits for particular datasets rather than by particular individuals..

The Productivity Commission could alternatively enter the privacy debate recognising the limits of its own expertise. As noted above, privacy is a complex, contested, culturally-specific concept. It is neither a univocal concept nor a trump card. As an institution concerned with economic growth and productivity, the Commission would necessarily need to rely on the expertise of others, relying on submissions *as evidence* (Bennett Moses, Gollan and Tranter 2015). But the debate about privacy is one that cannot easily be resolved by accepting submissions from "stakeholders", or even engaging in more widespread public consultation (although that would be preferable). What is required is a different type of expertise, as where the United Kingdom relies on ethical governance and frameworks, including a Data Science Ethical Framework for government (https://www.gov.uk/government/publications/data-science-ethical-framework), and a proposal for

Council of Data Ethics.[1] While not necessarily endorsing these particular frameworks and structures, given SSIT's involvement in ethical issues within the engineering profession, we would be happy to be involved in establishing such a framework for Australia.

What types of data and data applications (public sector and private sector) pose the greatest concerns for privacy protection?

There are clearly types of data that can be considered without reference to privacy – spatial data and geophysical data, for example. Creating incentives for collecting and sharing such data would be a useful and significant outcome of the Productivity Commission's inquiry. The primary questions here concern data quality, interpretability and compatability, rather than privacy.

However, while we would argue that "personal information" ought to be considered separately from other kinds of data, the line between the two is sometimes difficult to draw. In particular, data about individuals can be de-identified by stripping out identifying details (such as name and address) and through aggregation. In a sense, the data ceases to pertain to any specific individual. However, in some circumstances, data can be re-identified through a combination of advanced analytic techniques and the existence of other available datasets (eg Tockar 2014). The line between personal and non-identifiable data is thus difficult to draw, although there is extensive research exploring principles in this area, for example in k-anonymity and differential privacy. A decision to release de-identified data as non-personal data should draw on this research and conduct initial and ongoing testing to ensure that the risk of re-identification is negligible. There could also be a role for law here in discouraging re-identification of de-identified datasets and compensating those harmed.

What lessons from overseas jurisdictions can Australia learn from regarding the use of individuals' and business' data, particularly in regard to protecting privacy and commercially sensitive or commercially valuable information?

Despite all the difficulties above, it is clear that there are benefits to sharing de-identified aggregated data. An example of such practices is the "Crime Dashboard" provided by the Mayor's Office for Policing and Crime (MOPAC) in London (https://www.london.gov.uk/WHAT-WE-DO/mayors-office-policing-and-crime-mopac/data-and-research/crime/crime-dashboard). This enables communities to understand local crime, researchers to understand patterns and their causes, and policymakers to formulate strategies based on the evidence, including through evaluation of the impact of government programs in this area. Here, while data pertains to individuals (offenders and victims), it is aggregated by borough and subjected to testing before release. It is an example of how data availability can be productively enhanced, not by "balancing" privacy considerations, but rather by accommodating them.

Other matters

[1] House of Commons Science and Technology Committee, The big data dilemma: Government Response to the Committee's Fourth Report of Session 2015–16, Fifth Special Report of Session 2015–16 (26 April 2016), Recommendation 14, available at http://www.publications.parliament.uk/pa/cm201516/cmselect/cmsctech/992/992.pdf.

Figure 2 in the Issues Paper is inaccurate. The availability of legislation in Australia, through Austlii, has indeed been a motivation for other jurisdictions to make their own legislation and caselaw more broadly, and freely, available.

References

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21 July 2016