Call for papers

Big Data and accounting

Big Data sets are not new *per se*. Census data and medical records have been in existence for more than 100 years (Boyd & Crawford, 2012). 'Big Data', however, corresponds to a specific evolution of technologies that allow for the searching, aggregation and cross-referencing of large data sets now standing at 10 zettabytes (10 billion terabytes) and doubling every 2 years. As a consequence, the production and utilisation of Big Data raises important ethical questions for organisations, regulators and citizens (Hintze, 2017; Safari, 2016; Zarsky, 2016). Big Data can be mobilised for a variety of purposes, some of which may have positive outcomes for the community, specifically in medical fields (Obermeyer & Emanuel, 2016) and social policy (Blumenstock, Cadamuro, & On, 2015), particularly in relation to targeting criminal behaviour (Berk, 2012), optimizing health care delivery, and addressing inequality and poverty (Glaeser, Hillis, Kominers, & Luca, 2016; Glaeser, Kominers, Luca, & Naik, 2018). Despite this, there are growing concerns that Big Data infringes on privacy and provides opportunities for new forms of social surveillance that can be used to influence political and economic decisions. Indeed, Big Data surveillance has the potential to usher in an age of predictive profiling and anticipatory governance, producing unequal outcomes for different social groups, and influencing popular thinking around matters of public concern – compromising the core tenets of democracy (Lyon, 2014, 2015). This larger data surveillance apparatus is increasingly referred to as "surveillance capitalism" (Zuboff, 2015) or "data capitalism" (Lyon, 2014).

While the development of Big Data technology is firmly embedded in computer science, accounting, as an evolving expertise, increasingly uses these data sets and analytical techniques to inform management decision making, to predict allocation decisions within financial markets, and to inform auditing programs (Arnaboldi, Busco, & Cuganesan, 2017; Vasarhelyi, Kogan, & Tuttle, 2015; Warren, Moffitt, & Byrnes, 2015). Given the political potency of Big Data as evidenced in the events surrounding Cambridge Analytica (Cadwalladr & Graham-Harrison, 2018), Big Data may also be used to influence accounting regulators and shape the accounting profession in the future. In addition, it is likely to affect the dynamics of both internal and external forms of organisational accountability.

This special issue of *Critical Perspectives on Accounting* provides an opportunity to further advance discussions of the integration of all forms of accounting with critical issues in Big Data. We welcome submissions from a wide range of theoretical, methodological and empirical approaches – as long as they are consistent with the spirit of the critical paradigm of accounting research (e.g., Dillard & Vinnari, 2017; Gendron, 2018). Possible themes include:

- the use of Big Data and predictive algorithms in the work of management accountants
- ethical challenges in the integration of Big Data and traditional accounting information within firm ERPs
- the internal use of Big Data by government agencies, in the provision of public services such as health, education and transport and the aggregation and disclosure of this information in the form of dashboards
- the use of Big Data by those seeking to disrupt public discourse and traditional election processes
- the use of privacy disclosures and user agreements by Big Data collectors such as Facebook and Google/Alphabet as a form of accountability and responsibility. This includes the disclosure and consent requirements under various legal systems such as the EU-GDPR.
- new forms of organisational accountability that seek to protect consumers and labour from the risks imposed by increased surveillance and privacy violations
- critical explorations into the introduction of Big Data as a new subject matter within tertiary accounting education
- the accountability frameworks mobilised by collectors and brokers of Big Data, especially as they pertain to personal information
- the uses of Big Data in fraud detection, auditing and corporate risk management
- critical investigations into the potential use and misuse of Big Data by capital market participants in investment decision making
- the structures of governance and regulation surrounding Big Data organizations and the use of Big Data

1. Preliminary workshop

A workshop will be organized by the special issue editors to be hosted virtually through a webinar in mid-October 2019. Due to the global reach of the journal and the multiple time zones inhabited by the participants, it is likely that some of the webinar sessions will be held outside of normal work hours. Authors wishing to present at the workshop should contact Max Baker (max.baker@sydney.edu.au) by 1 August, 2019. All workshop participants will be required to provide a draft paper to be shared at least **four weeks** prior to the date scheduled for the workshop. Authors of selected papers from the workshop will be invited to submit revised papers for this special issue. These submissions will then be subject to the journal's normal review processes.

2. Submission process

Attendance and/or presentation at the workshop is *not* a pre-requisite for submission to the special issue. The closing date for submissions to this special issue is **15 March 2020**.

Manuscripts should be submitted electronically via https://www.journals.elsevier.com/critical-perspectives-on-accounting. The guest editors welcome enquiries from those who are interested in submitting. All papers will be reviewed in accordance with the normal processes of *Critical Perspectives on Accounting*. It is anticipated that this special issue will be published in 2022.

Any queries or enquiries about the special issue should be directed to Max Baker (max.baker@sydney.edu.au).

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