



Australian Academy of Science

Big data in Australian research

Issues, challenges and opportunities

Ten questions

1. What is your assessment of the current state of big data and the use of data analytics in your discipline? Are you aware of any reports that address this question? (NB: The term 'big data' here includes a diversity of data sources, not just those that are large in the conventional sense.)
2. Who are the researchers or research groups that are making innovative use of data and data analytics? In Australia? Internationally?
3. What makes this work so innovative?
4. What is limiting the use of data and data analytics in your discipline/sub-discipline in Australia?
5. What big research questions might be able to be addressed by access to relevant data, data analytics tools and/or skills? (We are interested in speculative answers that are considerably beyond currently accessible leading research questions.)
6. Do you know of any successful or not so successful collaborations between discipline experts and data scientists? What lessons can be drawn from these examples?
7. Does the education of postgraduate students and post docs need to change to enable them to successfully exploit data? In what ways?
8. Are you aware of, or been involved in, any of the Australian collaborations around data such as ANDS or Nectar? Do you know of the new Australian Research Data Commons?
9. Are you aware of, or been involved in, any international collaborations around data relevant to your field, or linking your discipline with other areas?
10. Any other comments?