DATA

skills and capability

IN THE AUSTRALIAN PUBLIC SERVICE
FOREWORD

Australia’s capacity to remain competitive in the digital economy is contingent upon its ability to harness the value of data. Data volumes are growing exponentially, and so too is the potential value of this data: in 2014, it was reported that the volume of data is doubling in size every two years, and by 2020, the volume of data in existence will reach 44 zettabytes, or 44 trillion gigabytes.

The Prime Minister has publicly stated his commitment to opening access to government data for economic growth, and public and private sector efficiency. This commitment has resulted in over 9,600 datasets being released on data.gov.au and the release of the Public Data Policy Statement that requires agencies to make their data open by default.

In light of the increasing volume and value of data, Australia needs to be supported by a workforce that has the skills and capability to analyse and extract the most value out of the data.

Data skills and capability are as critically important for the Australian Public Service (APS) as anywhere else. Data literacy across the APS will have a critical role in supporting evidence-based decision making, developing more efficient government policy and delivering services that meet the needs of people across Australia. Skills and knowledge in publishing, linking and sharing public data will help to make government services more citizen-focused.

Consistent with the National Innovation and Science Agenda, this APS Data Skills and Capability Framework will help the Government set an example and lead cultural and technological change by placing innovation at the centre of public policy.

It is our goal that this Framework will improve the way the Government invests in one of its key resources, the APS. It is our vision that the Government will set an example by cultivating a workforce that has the skills and capability to get the most value out of data for all Australians.

Angus Taylor

The Hon. Angus Taylor MP
Assistant Minister for Cities and Digital Transformation
BACKGROUND

Public Sector Data Management Report

The Department of the Prime Minister and Cabinet is leading delivery on implementing recommendations from the Public Sector Data Management Report released in December 2015. The Report delivers a roadmap to unlock the potential of public sector data to drive innovation, efficiency, productivity and economic growth.

The Report found that there is a global under-supply of data and analytics which limits the ability to get the most value out of publicly available data. Ready for work graduates with data capabilities are in short supply. During consultations most agencies expressed a need for more data capabilities.

Recommendation 5 from the Report suggests a whole-of-government approach to building data use and analytics capability within the APS. Such a strategy should encourage a ‘discovery mindset’ to enable better problem analysis, development of policy solutions, improved service delivery and public sector efficiency.

This APS Data Skills and Capability Framework will tackle the under-supply of data skills and fulfil the demand for more data capabilities in the APS.

DATA SKILLS AND JOB ROLES

Data skills are essential for all APS employees to support evidence-based, informed decision making, whether in policy development, programme management or service delivery. These skills also assist in improving operational efficiency, more efficient resource allocation, and improved engagement with stakeholders.

However, while foundational data skills are important for all APS employees, there are some roles across the APS that have a requirement for more specific data skills. The following specific data role definitions will have different applicability for each agency and/or team and are subject to further clarification. However, they provide a good reference point for APS employees and agencies to determine the skills and capabilities required in their roles.

Data analysts
Manipulate and interpret data for decision making and to solve problems

Data policy and law experts
Monitor the effectiveness of controls
Resolve compliance challenges
Advise on legal rules and controls to meet applicable legislation and standards

Data scientists
Are hybrid experts in analysis and software programming
Possess strong business acumen, coupled with the ability to communicate findings

Data architects
Ensure the design of data systems
Provide technical support for systems to undertake analysis, integrate, centralise, protect and maintain the data sources.

Data infrastructure engineers
Support the infrastructure required to make data applications and platforms available in agencies and across the public service

1 Data To Decisions Cooperative Research Centre, December 2015.
The Department of the Prime Minister and Cabinet has partnered with the Australian Public Service Commission (APSC), other Australian Government entities, and the private and academic sectors to develop a holistic approach to improve the overall data skills and capability across the APS.

Through this partnership, this APS Data Skills and Capability Framework has been developed to empower the Australian Public Service to harness the value of data and increase data literacy across all levels of the APS.

Four components form the APS Data Skills and Capability Framework:
- the Data Fellowship programme
- University courses
- the APS Data Literacy programme
- Data Training Partnerships.

Senior executives across the APS will encourage employees to take advantage of these learning and development opportunities.
DATA FELLOWSHIP

The Data Fellowship is a competitive programme to provide advanced data training to high-performing data specialists in the APS.

Up to ten APS employees each year will be selected to undertake three-month placements either within Data61 or an appropriate partner private sector organisation. Participants will bring a data-related problem or opportunity for which they will develop a solution that will benefit their agency.

Based on the nature of the participant’s problem, Data61 and the participant will work together to scope and determine the most suitable placement.

After the successful completion of the placement, participants will attend an achievement ceremony with the Secretary of the Department of the Prime Minister and Cabinet. Data Fellows will become part of an alumni network for future Data Fellows.

Data61

Data61 is creating Australia’s data-driven future, bringing people from across Australia and around the world into a connected ecosystem of talent, resources and innovation.

Data61 is Australia’s largest data innovation group, bringing together CSIRO’s Digital Productivity team and National ICT Australia. Data61 ensures Australia builds and maintains a world-leading data science capability and can apply that capability to develop new technology-based industries and transform existing ones.

For more information, please visit www.data61.csiro.au/.

Candidates

Commonwealth agencies and departments are invited to nominate high-performing candidates via their Data Champion representative. A list of agencies Data Champions is available at www.data.gov.au/dataset/list-of-data-champions.

Candidates should be well placed to influence data skills and capability development in their organisation, and to disseminate the expertise and knowledge gained from their Data Fellowship placement throughout their organisation.

Costs

Home agencies will continue to pay participants’ regular salary, superannuation and entitlements.

Participants’ travel and accommodation costs will be reimbursed by Data61 with funds apportioned by the Department of the Prime Minister and Cabinet.
**Timeframes**

There will be two rounds of applications per year with a maximum of five candidates selected per round.


Participants should ensure they have the support of their manager and are available to begin their placement within six months of the close of applications.

**Case studies**

**Data61 Placement**

Jeremy is a manager in the Department of Defence, where he works in the cyber security space. He is nominated by the Secretary as a candidate for the Data Fellowship and is subsequently selected for a three-month placement within Data61. During the programme, Jeremy wants to develop a tool to combat a particular kind of cyber security threat. He works alongside Data61 researchers and engineers for the duration of his placement, and is able to use his improved software skills to deliver outcomes within his home agency.

**Private Sector Placement**

Sarah is a senior advisor in the Treasury with responsibility for the Government’s FinTech program. The Treasury’s Data Champion thinks Sarah has the potential to be a leader in this space and nominated her for participation in the Data Fellowship. Sarah would like to look at the way FinTech can streamline the Government’s procurement and service delivery needs. Data61 brokers an agreement with a Sydney FinTech Hub, where Sarah is placed for three months to accelerate her understanding and formulate a solution to her agency’s problem. Sarah is then able to use the expertise gained from her placement to deliver a product that improves government efficiencies in its procurement processes.

**Contact**


Please contact the Public Data Branch at datapolicy@pmc.gov.au for queries.
UNIVERSITY COURSES

Specialised data analytics courses and subjects offered by tertiary institutions across Australia will help the APS improve its technical data analytics capability, while boosting the number of future graduates with the required data skills and capabilities.

The following short courses and individual subjects offer opportunities for development in specialised data skill sets, such as maths, statistics and social research methods, and the use of data analytics tools. Many degrees offer the opportunity to complete specialised electives, or to apply the skills to real-world problem or final project.

APS employees studying at tertiary institutions further facilitate the close collaborative partnership between the APS and the research and academic sectors to find real-world solutions to policy problems.

Candidates

These courses are open to the general public and APS employees.

APS employees working in areas that undertake technical data analytics work, as well as those working in programme implementation and policy development, will benefit from tertiary level courses.

APS agencies will determine their data analytics capability needs and the level of participation in these courses based on individual circumstances.

Costs

Individual agencies are responsible for covering any tuition or study costs associated with these subjects/courses.

Employees should contact their Learning and Development team within their Human Resources area to discuss study options and financial assistance. Study Assistance schemes encourage and support employees to undertake tertiary study that will contribute to the improvement of their professional skills and knowledge.

Timeframes

Most courses can be completed part time or through online or evening classes.

Employees should seek the support of their manager and their Human Resources area and discuss the implications for their work priorities and workload.
Short courses and professional development opportunities

**Australian National University**

Participants can enrol in these courses on a non-award basis. Please visit [https://apollo.anu.edu.au/apollo/default.asp?pid=8952](https://apollo.anu.edu.au/apollo/default.asp?pid=8952) to apply.

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**Using Data to Answer Policy Questions and Evaluate Data**

9 weeks with one week intensive on campus and 8 weeks online

Participants will learn a range of analytical techniques that can be used to answer policy and service delivery questions and how to measure the impact of policy. Four key aspects covered are: causation, attribution, implementation and documentation.

**Introduction to Programming for Data Scientists**

9 weeks with one week intensive on campus and 8 weeks online

Introductory programming within a problem-solving framework applicable to data science.

**Introductory Statistics for Business and Finance**

9 weeks with one week intensive on campus and 8 weeks online

Participants will gain an understanding of basic statistical techniques used for the analysis of financial and investment data.

**Using Data to Answer Policy Questions and Evaluate Policy**

9 weeks with one week intensive on campus and 8 weeks online

Participants will learn and discuss a range of analytical techniques that can be used to answer key policy questions, measure the impact of policy, and assess whether or not a particular policy improves lives.

**Introduction to Database Concepts**

9 weeks with one week intensive on campus and 8 weeks online

An introduction to database concepts and the general skills for designing and using databases, with a focus on relational database concepts and techniques.

**Data Mining**

9 weeks with one week intensive on campus and 8 weeks online  
Prerequisite - Introduction to Database Concepts COMP7240

A practical course on technology and research in the area of data mining, focussing on the algorithms and techniques of data mining.
Data Wrangling
9 weeks with one week intensive on campus and 8 weeks online
Prerequisite - Introduction to Database Concepts COMP7240
An introduction to core concepts of data cleaning, standardisation and integration, which are aimed at converting and mapping raw data into other formats that allow more efficient and convenient use and analysis of data.

Methods in Social Science Research
9 weeks with one week intensive on campus and 8 weeks online
An introduction to the main empirical social science methods, types of data and techniques for collecting social science data.

Applied Statistics
9 weeks with one week intensive on campus and 8 weeks online
Aimed at those who need to design experiments and carry out statistical analysis of their data. Emphasis will be placed on the development of statistical concepts and statistical computing.

Graphical Data Analysis
9 weeks with one week intensive on campus and 8 weeks online
Prerequisite – Introductory Statistics for Business and Finance STAT7055
Introduces the principles of data representation, summarisation and presentation, with particular emphasis on the use of graphics.

Statistics Course for Non-Statisticians
Two sessions (3.5 hours each)
Provides a practical overview of statistics for non-statisticians. It examines the basic techniques for applying statistics in a broad range of disciplines, including finance, health and the social sciences.
**Advanced data analytics – an introduction**

1 full day course

An entry to the advanced data analytics series courses, this course provides a landscape of data analytics, presenting the concepts, fundamental techniques, applications and projects that have been conducted within the Advanced Analytics Institute.

**Data Visualisation**

1 full day course

Designed to take beginners through an introduction to Tableau Software and Data Visualisation, to manage and transform complex data and analysis.

**Data Mining Stage 1**

Please contact the UTS Advanced Analytics Institute for more information as it becomes available.

**Data Mining Stage 2 (Intermediate)**

1 full day course

The next level to progress to after Data Mining Stage 1. Participants will apply an industry standard analytics life cycle methodology for data mining and pattern discovery, and interpret, synthesise and communicate insights extracted from analytics.

**R Programming Stage 1 (Introduction)**

1 full day course

R is a popular open source programming language that excels in statistics, visualisation and data analysis. This course will teach the basics of using R, focusing on data import and manipulation, visualisation and simple statistical tests.

**R Programming Stage 2 (Intermediate)**

1 full day course

Participants will learn more visualisation and statistical methods in R, dealing with larger datasets and the need to process them significantly. Participants will also examine more statistical techniques and introduce concepts to do with analysing time-series data.

**R Programming Stage 3 (Advanced)**

1 full day

Participants will learn to process large amounts of data, begin developing their own packages, and learn to track down bugs and look for performance improvements in their code.
UTS Advanced Analytics Institute (continued)

Text Analytics and Sentiment Analysis
1 full day course
This course will introduce basic concepts and techniques of text mining and sentiment analysis, alongside hands-on practice for several applicable R packages for analysing sentiment.

Probability and Statistics
Please contact the UTS Advanced Analytics Institute for more information as it becomes available

Machine Learning – an introduction
Please contact the UTS Advanced Analytics Institute for more information as it becomes available

UNSW
Participants can enrol in this course on a non-award voluntary basis. Please visit www.futurestudents.unsw.edu.au/non-award-short-courses to apply.

Data Management for Statistical Analysis
In person
Participants will learn the use of database and spreadsheet tools to organise and query statistical data, programming in an advanced statistical package for file management, data manipulation and cleaning, preparing data for a range of statistical procedures and the creation of data analysis reports.

Fundamentals of Data Analysis
4 contact hours per week, over 13 weeks
Fundamentals of data analysis with emphasis on the analysis of data arising from real-life situations. Participants learn the principles of good experimental design, as well as the interpretation and critical evaluation of statistical information.

University of Western Australia

Introductory Analysis of Linked Health Data
Five day intensive course
Health researchers, clinical practitioners and managers learn the theory and skills to analyse linked health data at the introductory to intermediate level.

Advanced Analysis of Linked Health Data
Five day intensive course
Health researchers will build on their pre-existing theoretical knowledge and skills in the analysis of linked health data by exploring a number of advanced theoretical topics.
## Degrees

**Australian National University**

**Master of Applied Data Analytics**
1.5 years full time or part time equivalent (min. 72 units)

**Graduate Diploma of Applied Data Analytics**
1 year full time or part time equivalent

**University of Sydney**

**Master of Data Science**
1 year full time or part time equivalent (min. 48 credit points)

**Graduate Certificate in Data Science**
0.5 years full time or part time equivalent (min 24 credit points)

**Deakin University**

**Master of Data Analytics**
2 years full time or part time equivalent

**Graduate Diploma of Data Analytics**
1 year full time or part time equivalent

**Master of Science (Research) – major in Data Science**
2 years full time or part time equivalent

**University of Technology, Sydney**

**Master of Data Science and Innovation**
2 years full time or part time equivalent
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<thead>
<tr>
<th>University</th>
<th>Program</th>
<th>Duration</th>
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<tbody>
<tr>
<td>RMIT University</td>
<td>Master of Analytics</td>
<td>2 years full time or part time equivalent</td>
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<tr>
<td>Monash University</td>
<td>Master of Data Science</td>
<td>2 years full time or part time equivalent</td>
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<tr>
<td></td>
<td>Graduate Diploma of Data Science</td>
<td>1.4 years part time - Online delivery</td>
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<tr>
<td>University of South Australia</td>
<td>Master of Data Science</td>
<td>2 years or part time equivalent</td>
</tr>
<tr>
<td></td>
<td>Graduate Certificate in Data Science</td>
<td>0.5 years full time or part time equivalent</td>
</tr>
<tr>
<td>University of Western Australia</td>
<td>Bachelor of Science, Bachelor of Philosophy – major in Data Science</td>
<td>3 years (BSc), 4 years (BPhil (Hons)) or part time equivalent</td>
</tr>
<tr>
<td>University of New South Wales</td>
<td>Master of Information Technology (Data Science and Engineering)</td>
<td>2 years full time or part time equivalent. Graduates who have a background in Computing can receive advanced standing</td>
</tr>
<tr>
<td>La Trobe University</td>
<td>Master of Business Analytics</td>
<td>2 years full time or part time equivalent</td>
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APS DATA LITERACY PROGRAMME

The APS Data Literacy programme is a suite of initiatives that will improve the data capabilities of non-specialist APS employees. The programme has been developed by the APSC in collaboration with the Australian Bureau of Statistics (ABS), the Australian Taxation Office (ATO) and the Department of the Prime Minister and Cabinet. The programme offers a suite of flexible learning options designed to build core data literacy skills, and aims to ensure employees across the APS can develop a minimum foundational level of data literacy.

The programme focuses on five core skills for using data in the APS:
- Providing evidence for decision makers
- Undertaking research
- Using statistics
- Visualising the information
- Telling the story.

The programme has a wide range of learning options for each skill area:
- Key reading accessed via the APS Data Literacy Learning Guide
- Workshops
- E-learning courses.

Candidates

As basic data skills are increasingly important across all job descriptions in the APS, the APS Data Literacy programme is suitable for APS employees, including non-specialist roles.

Costs

APS agencies are responsible for covering any costs associated with the suggested learning options listed in the APS Data Literacy Learning Guide.

The learning options are from both government and non-government sources. Some can be accessed at no cost and others require a fee or subscription.

Timeframes

The APSC will update the National Learning and Development Calendars as training options continue to be rolled out. For more information, please visit www.apsc.gov.au/learn-and-develop/national-learning-and-development-calendars.
**APS Data Literacy Learning Guide**

The APS Data Literacy Learning Guide is a self-guided resource that includes information and materials to support APS employees looking to improve their data literacy. This includes a catalogue of initiatives and training courses from which staff can self-select in accordance with their needs and purposes.


**Workshops**

The APSC is partnering with the ATO and the ABS to deliver workshops targeting key aspects of foundational data literacy.

**E-learning courses**

The APSC is partnering with the ATO and the ABS to deliver e-learning courses by the end of 2016, including:

- Introduction to statistical concepts
- Turning data into information.

**Contact**

For more information about the APS Data Literacy Programme, please contact coreskills@apsc.gov.au.
DATA TRAINING PARTNERSHIPS

Data Training Partnerships are an ongoing initiative linking the APS to partner organisations’ training and expertise relating to data and data use. These partner organisations have been selected due to their relevant technical expertise and knowledge to deliver training that has practical and real-world application to the APS.

Current partner organisations are:

• Open Data Institute Queensland (ODI QLD)
• The Office of the Australian Information Commissioner (OAIC)
• Data to Decisions Cooperative Research Centre (D2D CRC).

The Department of the Prime Minister and Cabinet will continue to scope relevant partner organisations to make their training, development and expertise available to staff across the APS.

If you or your organisation would like to be involved, please contact datapolicy@pmc.gov.au.

Candidates

APS employees that have a foundational level of understanding of the purpose and use of data and are interested in upskilling in partner organisations’ specific area of data related expertise.

Partner organisations have offered a number of training courses that span skill and knowledge levels. APS employees and agencies should discuss the target audience and skill levels with the partner organisation.

Costs

Partner organisations are available to tailor training for organisations depending on their needs. Partner organisations are also able to deliver training in house or interstate.

APS agencies should contact partner organisations to organise training.

Timeframes

Training partnerships will occur on an ad hoc basis based on the availability of APS agencies and these partner organisations.
Open Data Institute Queensland

The Open Data Institute is a global network, catalysing the evolution of open data culture to create economic, environmental, and social value. It aims to help unlock supply, generate demand, and create and disseminate knowledge to address local and global issues. The ODI presence in Australia is badged as ODI QLD, currently based in Brisbane, and provides a number of data and open data related training courses, workshops and intensive courses.

Resources

ODI QLD can schedule face-to-face training courses and/or tailor custom training outside of Brisbane and is able to negotiate potential dates and availability of interstate training sessions.

Learning

Open Data

• What is open data, and how to define open data
• Licensing data
• Choosing the right format for open data
• Finding data.

Short online e-learning modules. Please visit queensland.theodi.org/home/learning/courses/

Open Data Training

Intensive

• Evaluation of data sources, data formats and preparing data for use
• Blending of data sets and trouble shooting
• Creating visualisations and dashboards with data
• Publishing to Tableau Public
• Project workshop: the second half of the day’s intensive will involve a hands-on workshop using datasets. Everyone will leave having created their own visualisation and dashboard.

Numbers capped at 15 per class

ODI can deliver this course in other states/cities at a modified cost.

Full day intensive course.
**Working with Data: 101**

Identify the fundamental and core skills needed for working with data effectively and reproducibly.

Workshops are currently designed for people with little to no prior computational experience. They follow a narrative structure, working with one dataset through the whole data lifecycle from data and project organisation to data analysis and visualisation.

Data Carpentry develops and teaches workshops on the fundamental skills needed to use data for research, business insight, policy development and more. Data Carpentry focuses on the introductory computational skills needed for data management and analysis in general.

Numbers capped at 15 per class.

ODI can deliver this course in other states and cities at modified cost.

Full day course.

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**Open Data Training Intensive: Using Data with ESRI Story Maps**

A hands-on step-by-step workshop through the process of building, refining, and publishing a story map.

Participants are required to come with a story concept in mind and bring as much supporting content as they can muster in the form of photos, videos, content and web maps.

Participants will leave this workshop with a completed or near to completed publishable Story Map to start using.

Learning outcomes:

- how to access the Story Maps software
- how to select and choose between the various template options and evaluate the most suitable for each particular application
- foundation skills necessary to design and build content into a Story Map
- tips and tricks on how to turn a story map into a polished communication product.

Numbers capped at 15 per class.

ODI can deliver this course in other states and cities at a modified cost.

Full day course.
Open Data Masterclass series

Learning outcomes:
• Increased data literacy and more confident consumption of data
• Improved skills in finding, accessing and manipulating data to generate new knowledge and insight
• Ability to interpret open licenses and apply proper attribution as required
• Increased awareness of how to manage sensitive data and techniques for anonymising data
• Increased confidence in prioritising release of data or releasing data safely.

Numbers for this course are capped at 20 per series.

Three half day courses.
Class 1: Using open data
Class 2: Choosing data to publish
Class 3: Preparing data to publish

ODI QLD also has a number of courses currently under development, including:
• Preparing sensitive data for publishing
• Open Data Law & Licensing (available as eLearning)
• Earning open data certificates (available as eLearning)
• Anonymising data for publishing
• Master Data Series

Contact

Please contact ODI QLD via email at connect@odiequeensland.org.au with contact details and the nature of the training you are interested in.
The Office of the Australian Information Commissioner

The Office of the Australian Information Commissioner (OAIC) is an independent Commonwealth statutory agency that works to protect the privacy of individuals under the Privacy Act 1988. The OAIC also has functions in the area of freedom of information and government information policy.

The community expects data, including personal information, to be appropriately handled by government and looks for strong accountability. Good governance and design will protect individuals’ privacy and facilitate effective data sharing without risking privacy. Agencies are encouraged to build privacy into systems and projects from the design stage onwards.

As the national privacy regulator, the OAIC aims to make privacy simple for agencies and is committed to working with agency staff to build privacy knowledge.
Resources
The OAIC has a suite of publicly available resources to help agencies understand their privacy obligations and minimise privacy risks. The OAIC welcomes enquiries from agencies concerning training needs or presentation and speech requests.

<table>
<thead>
<tr>
<th>Australian Privacy Principle Guidelines</th>
<th>Outlines the mandatory requirements of the Australian Privacy Principles (APPs), how the OAIC interprets the APPs, and matters taken into account when exercising functions and powers under the Privacy Act.</th>
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<tr>
<td>Online resource</td>
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<tr>
<th>Introduction to the APPs and the OAIC’s regulatory approach</th>
<th>Summarises the obligations in the APPs. It also discusses the Privacy Commissioner’s regulatory powers, and approach to using them. It is a useful training resource for people who are not familiar with the Privacy Act.</th>
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<tr>
<td>Online resource</td>
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<tr>
<th>Privacy Management Framework</th>
<th>A tool to help agencies meet their ongoing privacy obligations and embed a culture of privacy.</th>
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<td>Online resource</td>
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<tr>
<th>Guide to Undertaking Privacy Impact Assessments</th>
<th>Describes a process for undertaking a privacy impact assessment (PIA). A PIA is a systematic assessment of a project’s privacy impacts and sets out recommendations to manage or eliminate impacts.</th>
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<tr>
<th>Guide to securing personal information</th>
<th>Provides guidance on the reasonable steps entities are required to take under the Privacy Act to protect the personal information they hold from misuse, interference, loss, unauthorised access, modification or disclosure.</th>
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<td>Online resource</td>
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Contact
Please contact the OAIC via email at enquiries@oaic.gov.au or via their Enquiries Line on 1300 363 992.
Data to Decision Cooperative Research Centre

The Data to Decisions Cooperative Research Centre (D2D CRC) was established in July 2014, and is part of the Cooperative Research Centres Programme.

The D2D CRC has a vision of becoming a leading provider in big data capability, and supporting the development of a sustainable big data workforce for Australia. As a data-oriented Cooperative Research Centre, the D2D CRC has unique strengths in creating partnerships between government agencies and research and learning organisations that will support the development of data-related skills. While the D2D CRC’s current focus is on big data challenges related to national security, many of the underlying concepts are applicable to areas as diverse as taxation and health.

Resources

The D2D CRC can organise training as a public offering to staff from a range of agencies, or can tailor custom training to suit specific agencies’ needs. Training courses can be scheduled outside of Adelaide, and may include online components, face-to-face delivery or a blend of both.

Introduction to Big Data

Increases the awareness of key big data and enable end users of data, for example analysts and policy officers, to understand how big data can enrich their outcomes

This course can be tailored to suit specific agencies’ needs but could include:

- Defining big data
- The data science life-cycle
- An overview of relevant concepts such as data mining
- Implications of working with big data for agencies.

Big Data Reference Architecture Seminars and Masterclasses

Shares experiences and research findings on big data tools, techniques and policy implications.

Describes case studies delving into the challenges encountered and solutions developed

This course can be tailored to suit specific agencies’ needs but could include:

- Reference Architecture
- Data Science Platforms
- Regulation of big data.
Get involved

Data Competency Projects: The D2D CRC is currently leading four major projects in relation to quantifying data competencies with the aim of enhancing the management of the data workforce. The projects include creating a data competency framework, recognition system, development assessment tool and a guide to enhancing organisational data capability. There are many opportunities for agencies to partner with the D2D CRC on these projects and achieve outcomes tailored to their organisational needs.

PhDs: The D2D CRC supports 48 PhD students through scholarships at universities across Australia. Focussed on real-world big data challenges, each PhD works towards identifying innovative, applied research solutions and is supported by expert researchers and D2D CRC staff. Agencies can sponsor PhD scholarships in a number of ways, including funding, providing internships or work placements and mentoring. Agency staff members may also be eligible for PhD scholarships.

Contact

Interested agencies should contact Ms Megan Prideaux, Education and Training Manager, via email at megan.prideaux@d2dcrc.com.au. For more information, please visit the D2D CRC website at www.d2dcrc.com.au.