Data skills for informed evidence and insights: 
*Australia’s experience in building a Data Profession*

Central Statistics Office

7 October 2022
Australian Public Service (APS) Data Profession

Data Professional Stream

Launched September 2020

Purpose: uplift data capability across the APS

Source: Department of Prime Minister and Cabinet

One of three APS professional streams: Data, Digital, HR

A wide range of initiatives being undertaken

Source: Department of Prime Minister and Cabinet
The Data Professional Stream Work Program

**Establishing the professional stream**
- Set up the professional stream
- Establish a Senior Reference Group
- Identify the Head of Profession
- Develop a Professional Stream Strategy
- Collaborate and network
- Establish professional network

**Getting it right from the start**
- Attract the right skills to APS roles
- Streamline recruitment across the APS
- Develop an APS profile
- Build inclusion into the professional stream
- Ensure appropriate entry level qualifications
- Collaborate with the education sector to uplift entry level qualifications

**Developing sophisticated and specialist capabilities**
- Enhance capabilities
- Design job role profiles
- Identify and develop capabilities
- Identify and promote structured learning opportunities
- Encourage learning by immersion

**Embedding a professional workforce**
- Retain and grow workforce for the whole APS
- Define and promote career pathways
- Support professional communities
- Identify professional standards
What has been achieved?

- Data Professional Network
- Data Graduate Recruitment
- Data Literacy Pathways
- Entry Level Programs
- APS Data Capability Framework
- Member Community Platform
- Enhanced mobility opportunities
- SES Data Leadership course
- Data job roles
- Specialist Learning Offerings

APS Data Professional Stream
APS Data Professional Network

• By July 2022, 2100 members from across the APS and externally

• A LinkedIn group also allowed APS data professionals to network

• From August 2022, the network moved to the Data Profession Members’ Community Platform.
Data Profession Members’ Community Platform

- Co-hosted on the same platform as the APS Digital Profession
The MCP is a space for Data Professionals to connect and collaborate.

Key features:

- Communities of Practice
- Resource libraries
- Events
- Discussion threads and blogs
- Member directory
- Members can choose to receive emails summarising activity (either daily or weekly)
Australian Public Service
Data Graduate Recruitment

• We have recruited graduates for three data streams:
  • Data Analysts
  • Data Scientists
  • Statistical Methodologists

• 2021
  • 216 job offers
  • 140 graduates placed in agencies

• 2022
  • > 300 data graduates across the APS
Entry Level Programs

• Working with the Australian Public Service Commission (APSC) to establish new entry level programs
• Targeting undergraduates in data related fields
• Participants in this new data cadet program will be based in selected regional university campuses
• As well as undertaking paid work while still studying, data cadets will be provided additional training and networking opportunities
APS Data Capability Framework

Provides the foundation to building data capability and supporting data career paths

**DEFINES**
The *data* skills, knowledge & behaviours required in the APS

**ONE LANGUAGE**
Equips the APS with a clear and consistent language to use for data capabilities

**GUIDES**
APS employees, managers & HR to build data capability and expertise
Navigating the framework...

### Data Communication

Effectively communicating with data or about data with a range of audiences.

**Advanced**
- Can develop and deliver an advanced level narrative to communicate insights drawn from complex data sources and outputs.
- Maintains understanding of new trends and innovations relating to data communication (including artificial intelligence-based technologies) and develops skills in these where relevant.
- Understands the importance of translating technical concepts into non-technical language and can adapt communication effectively for a range of audiences.
- Can use innovative approaches to improve the process of summarising data into meaningful narratives.
- Uses high-quality analytics and visualisation to communicate insights from data.
- Can effectively listen to technical and business stakeholders and understand and interpret their data needs.

**Intermediate**
- Can develop and deliver effective narrative to communicate insights drawn from a range of data sources and outputs.
- Can comfortably question data and results they are presented, and answer technical questions relating to their data, relevant to the audience.
- Can communicate effectively between technical and non-technical experts across data production, management, or use, including clients, managers and data professionals.
- Can effectively communicate the relationship between the data and the context in which it is used.

**Foundation**
- Can develop and deliver a simple narrative to communicate insights related to their data.
- Can ask and answer a range of questions relating to their data, relevant to the audience.
- Can communicate effectively with a range of stakeholders during data production, management, or use.

**Associated Categories**
Enhanced Mobility opportunities

Developing data skills through immersive learning:

• Aimed to uplift data capability
• Typically 3 – 6 months in duration
• Evaluated what worked well, and areas for improvement
Data Job Roles Overview

There are four core data roles that have been included in this suite of Data Roles.

In addition there are two specialisation roles that have been included in this suite.

Each persona highlights key descriptors of the role, providing common language in addition to outlining key technologies, specialisations and relationships.

The second page of each persona maps to the capabilities and proficiency levels of the APS Data Capability Framework (DCF) and Skills for the Information Age (SFIA 8).

APS Data Professional Stream
Senior Executive Service Data Leadership Course

Uplifting data capability for Senior Executive Service (SES) officers to build a data-driven culture across the APS.

• Administered by the APS Academy

• Course content mainly delivered by ANU teaching staff.
Masterclass: Why data matters and how to get value from it
Agency data governance and SES roles and responsibilities
Data analytics fundamentals
Influencing with Data
Managing Data
Data Quality
Emerging Data techniques
Data Literacy Pathways

- Five learning clusters are in the pathway
  - 2 are essential
  - 3 are recommended

1. Using data in the APS
2. Data trust and ethics
3. Foundations of data research and analytics
4. Communicating data insights
5. Simplifying statistics
Contact the Data Profession

**Registration Form**
Join the network to receive newsletters from the Data Profession

**Email**
Contact the Data Professional Stream team directly by emailing data.profession@abs.gov.au