



DEVELOPING DIGITAL AND DATA SKILLS AND CAPABILITIES IN PUBLIC SERVICE ORGANISATIONS

SFIA Webinar 14 Sep. 2022



With Grant Nicholson
Lead Capability Architect
APS Digital Profession



The Australian Public Service (APS)...

- Employs approximately 10,000 digital professionals in around 200 agencies
- Builds and supports this workforce through the APS Digital Profession
- Uses a capability model and capability frameworks to describe digital roles
- Has been using SFIA extensively since 2010
- Also uses other capability frameworks like the APS Data Capability Framework (DCF)
- Established a country-wide SFIA licence in 2021
- Supports the Australian and New Zealand public sector with a SFIA community of practice
- The Community of Practice invites collaboration from the entire SFIA user community through workshops focused on SFIA enhancement (currently working towards SFIA 9 change requests)



Influencing the development of SFIA

- The Australian and New Zealand SFIA community of practice was successful in suggesting the following skills for inclusion in SFIA 8:

Data engineering

Data science

High-performance computing

Machine learning

Numerical analysis

Scientific modelling

- The community is working on suggestions for SFIA 9, including:
 - More guidance and examples of how to use SFIA
 - Expanded consideration of behavioural skills, ethics, knowledge etc.
 - New skills related to Industrial control systems, Mathematics, Linguistics and Broadcast and digital media.
- The community thinks of SFIA as ‘our framework’



The Australian whole-of-country SFIA license

- In 2021 Australia established an economy-wide license that covers everyone and all businesses based in Australia.

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 SFIA-AU

- For more information: <https://www.digitalprofession.gov.au/guides-and-resources/skills-framework-information-age>



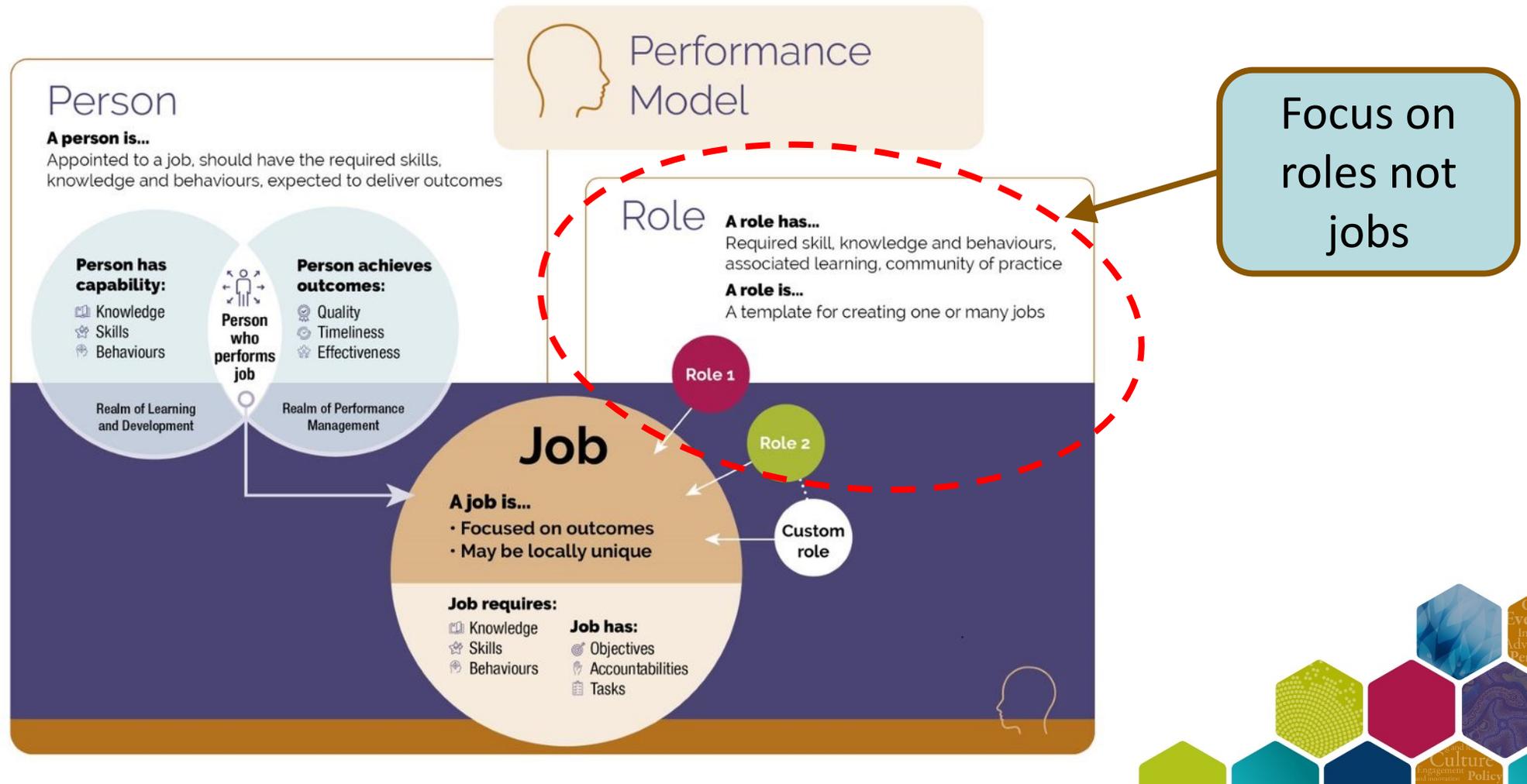
APS Career Pathfinder is...

- a **Digital Profession** initiative aimed at building and retaining digital capability in the Australian Public Service
- designed to help people compare their skills to digital roles of interest to them
- based on capability frameworks (primarily SFIA) and can adapt to any
- data driven – role data comes from data.gov.au, provided by experts
- uses learning catalogues mapped to capability frameworks
- quite new – first release 22 July 2022
- working towards open source development – if you are interested in potential collaboration please contact us via: DigitalProfession@apsc.gov.au



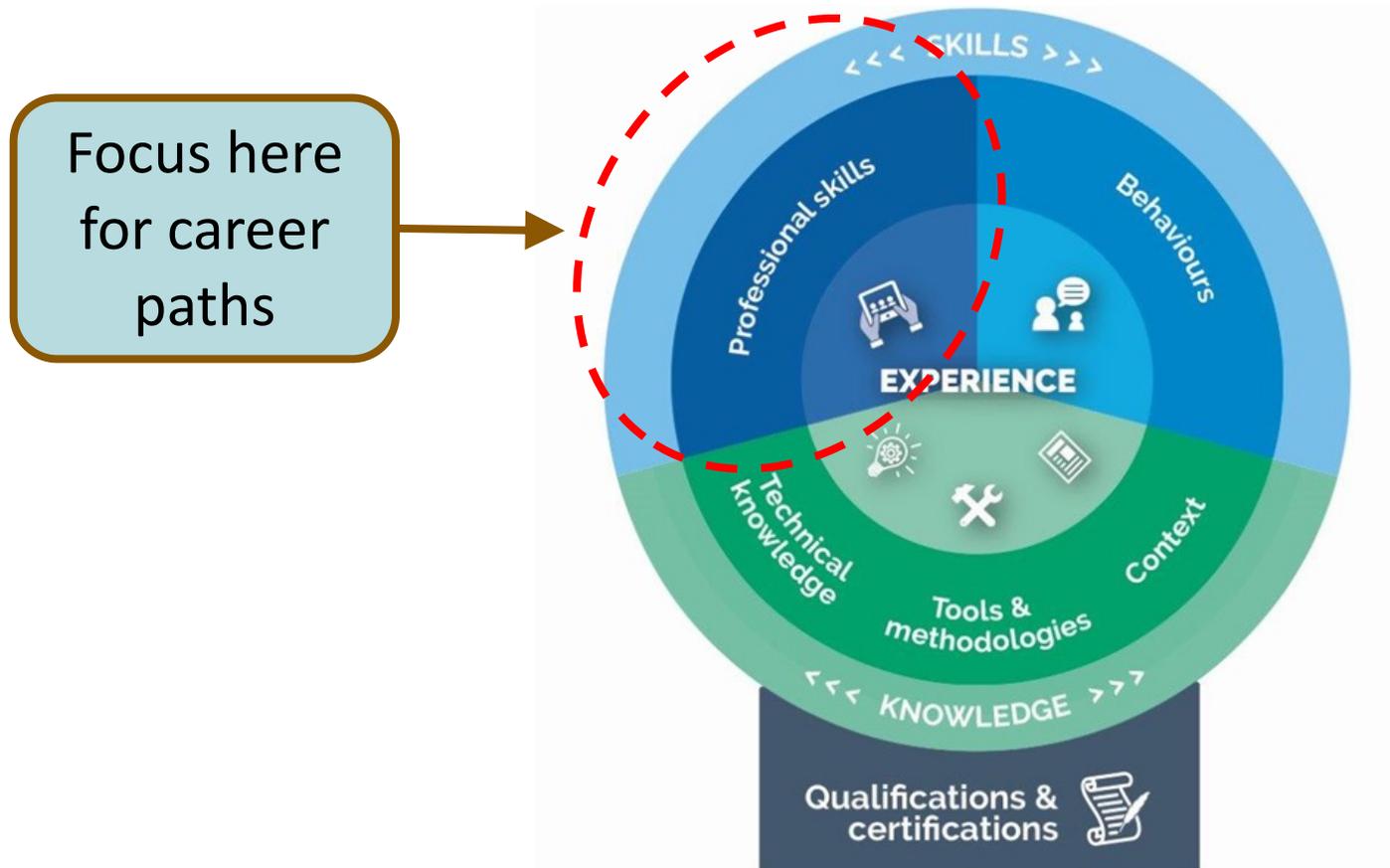
A few things to note before we dive in...

- Career Pathfinder operates at the role level, not Job level



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- Career Pathfinder operates at the Role level, not Job level
- We focus on the professional skills part of our capability model

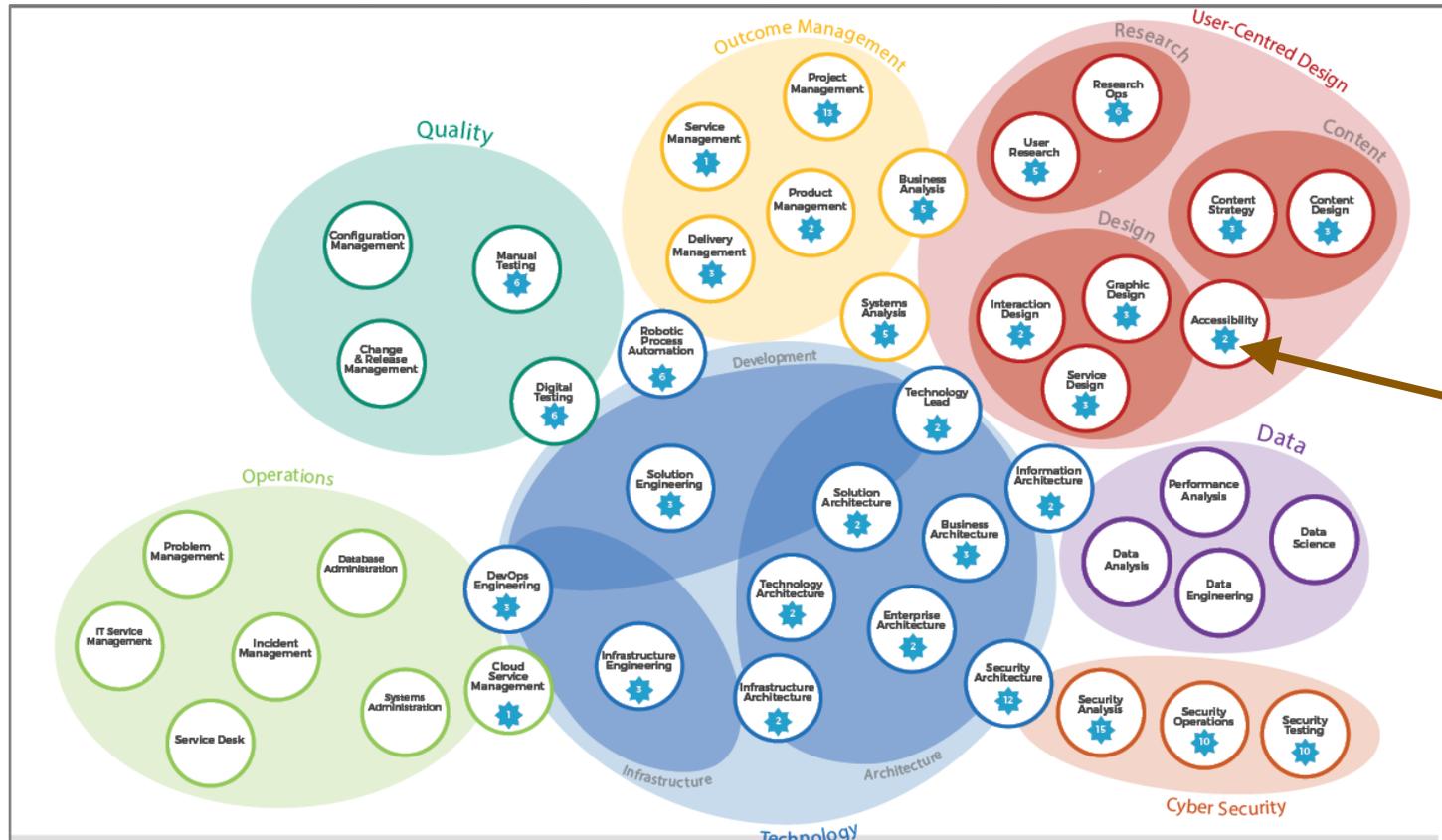


But don't forget that all capabilities are important in jobs



A few things to note before we dive in...

- Career Pathfinder operates at the Role level, not Job level
- We focus on the professional skills part of our capability model
- We are still working our way through the digital skills landscape



Indicates roles we have defined



APS Career Pathfinder contains...

- 177 digital roles in total across 48 disciplines, growing as we collect more data
- 3 capability frameworks: SFIA, CII Sec (cyber security) and DCF (data)
- Learning catalogues mapped to the capability frameworks
- Features for workforce managers to find people based on their skills, if people choose to be discoverable

Live demo... [APS Career Pathfinder](#)

[Jump to end](#)

A guided tour follows if a live demo is not available or practical





Discover new career opportunities

Explore potential roles in the Australian Public Service based on your skills

Get started

Here's how you get the most out of Career Pathfinder

Add your skills to get started

Explore matched roles

View learning resources

Plan your career pathway

Your data will not be saved unless you make an account. [View privacy notice](#)

View pathways

Skills | Interests | Filters

Add your skills

More role demand ↑
← Lower role classification

Higher role classification →

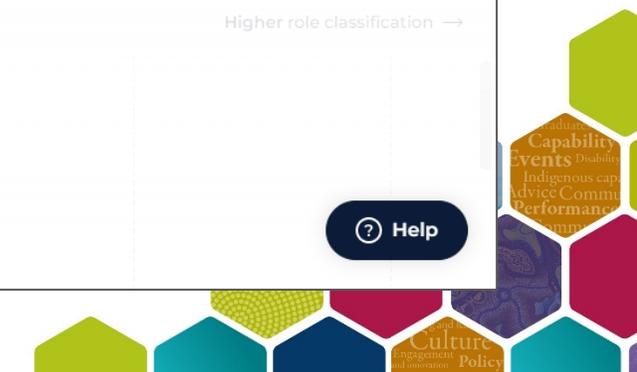
Security Architecture - Typical APS

EL1 Security Architect | EL2 Lead Security Architect

Software Engineering - Typical APS

APS5 APS4 Associate Software Engineer | APS6 Software Engineer | EL1 Senior Software Engineer | EL2 Principal Software Engineer

Help



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Learn about roles using Search

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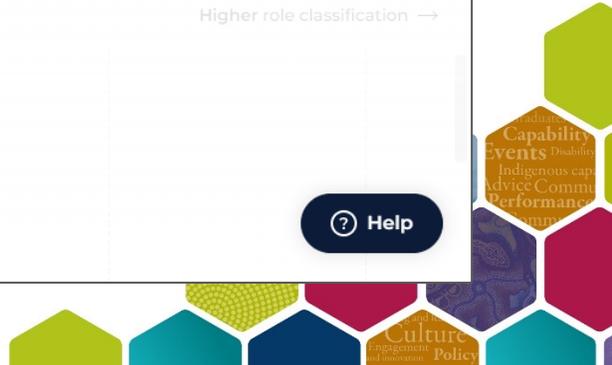
Security Architecture - Typical APS

[EL1 Security Architect](#) [EL2 Lead Security Architect](#)

Software Engineering - Typical APS

[APS5 APS4 Associate Software Engineer](#) [APS6 Software Engineer](#) [EL1 Senior Software Engineer](#) [EL2 Principal Software Engineer](#)

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user

User Researcher APS6

Also known as User Experience Researcher

Typical APS

Role name and classification

Service Desk Assistant APS3

Also known as End User Computing Technical Officer, End User Computing Delivery Officer, End User Computing Support Officer

Typical APS

Service Desk Analyst APS5

Also known as End User Computing Technical Officer, End User Computing Delivery Officer, End User Computing Support Officer

Typical APS

Alternate names

Senior Service Desk Analyst APS6

Also known as End User Computing Technical Officer, End User Computing Delivery Officer, End User Computing Support Officer

Typical APS

Lead User Researcher EL1

Also known as User Research Lead, User Research and Design Lead

Typical APS

Collection role comes from

Associate Service Desk Analyst APS4

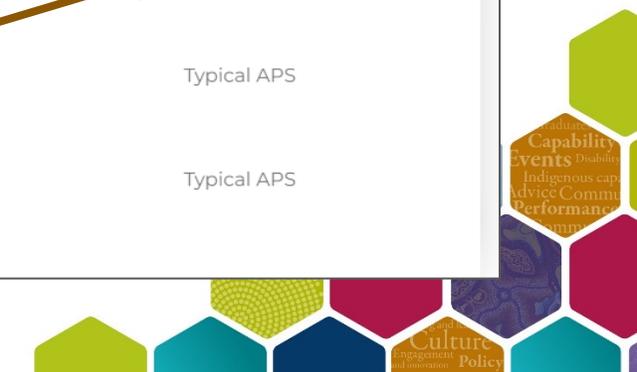
Also known as End User Computing Technical Officer, End User Computing Delivery Officer, End User Computing Support Officer

Typical APS

Interaction Designer APS6

Also known as User Experience Designer, User Interface Designer

Typical APS



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APS6

User Researcher

User Researchers design, organise, participate in and carry out user-centred research. They develop a deep understanding of the users and advocate for recommendations that improve the users experiences with the service. They use research findings to solve problems for the user and the team/Agency. They may contribute to the creation of prototypes for user testing.

0% You have none of the skills needed for this role

How do I upskill?

Description

Search APS jobs

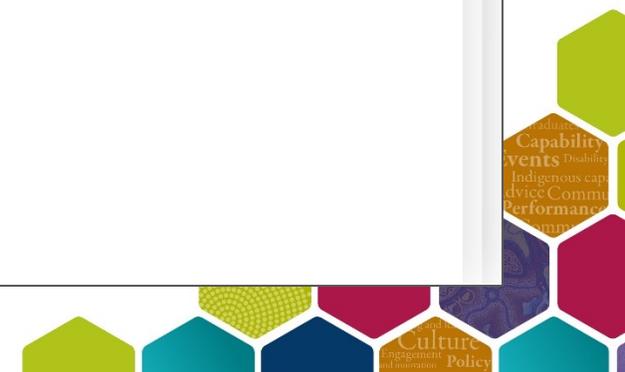
Add to plan

Find a job

Skills required

Essential	
Skills to have before applying for a role like this	
Missing skills	
Research	Level 4
Specialist advice	Level 4
User experience analysis	Level 4
User experience evaluation	Level 4
User research	Level 4

Desirable	
Skills that can be learnt on the job if necessary	
Missing skills	
Business situation analysis	Level 3
User experience design	Level 4



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APS6

Search APS jobs

Add to plan

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0% You have none of the skills needed for this role

Essential
Skills to have before applying for a role like this

Desirable
Skills that can be learnt on the job if necessary

Save learning resources to your career plan

Hide learning options

Learning recommendations

Recommended set of resources for you

100% You could gain 7 skills needed to progress from 0% to 100% skills match for this role

+ Add 6 to plan

Service Design User Journey Mapping

This course will teach you how to map a user journey from identifying personas and understanding their emotions to understanding their intentions and expectations.

Skills covered by this online resource

- Research Level 4
- User research Level 4
- +1 other skill

Being a Better Communicator: Grammar, De-jargonising and articulation

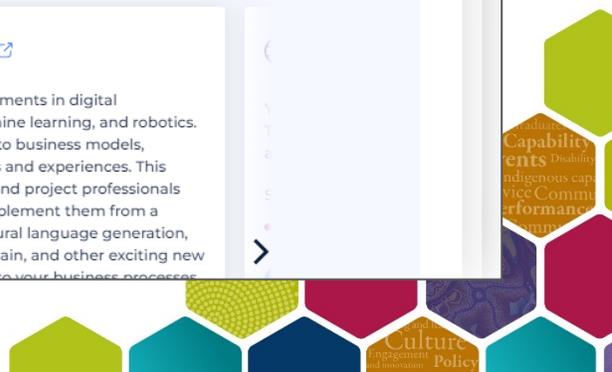
Professional communication is one of the most beneficial and useful skill sets that employees of all stripes can possess. In this course, you'll learn both effective communication strategies and how to avoid common communication mistakes.

Skills covered by this online resource

- Specialist advice Level 4
- +1 other skill

Learning Digital Business Analysis

More and more organizations are making investments in digital technologies such as artificial intelligence, machine learning, and robotics. These new technologies have sparked changes to business models, business operations, and customer expectations and experiences. This course was designed to help business analysts and project professionals grasp what these changes mean and how to implement them from a business perspective. Angela Wick explores natural language generation, speech recognition, swarm intelligence, blockchain, and other exciting new technologies, laying out how each one can fit into your business processes.



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Enter your skills

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[View pathways](#)

Skills Interests Filters [Add your skills](#)

↑ More role demand ← Lower role classification Higher role classification →

Security Architecture - Typical APS
EL1 Security Architect EL2 Lead Security Architect

Software Engineering - Typical APS
AP55 AP54 Associate Software Engineer AP56 Software Engineer EL1 Senior Software Engineer EL2 Principal Software Engineer

[Help](#)

Career Pathfinder x +
https://aps-career-pathfinder.digitalprofession.gov.au

Australian Government **APS CAREER PATHFINDER** Search for roles  Explore roles Your career goals Log in

Discover new career opportunities

Explore potential roles in the Australian Public Service based on your skills

Add your skills

We can suggest the skills you may have by reading your CV.
Any data you provide here will not be saved outside your computer.

Drag & drop your CV here or [browse](#)
Supported file formats: CSV, TXT, DOCX (preferred) or PDF
You can also use your LinkedIn profile to create a PDF CV. [Find out how](#)

Or [paste](#) your CV text here

Or [select skills manually](#) if you already know which skills you have

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Skills Interests Filters

↑ More role demand ← Lower role classification

Security Architecture - Typical APS
EL1 Security Architect EL2 Lead Security Architect

Software Engineering - Typical APS
APS5 APS4 Associate Software Engineer APS6 Software Engineer EL1 Senior Software Engineer EL2 Principal Software Engineer

Higher role classification → Add your skills

Help

We can scan your CV and make suggestions

Or you can select skills manually

Search for any role or skill

Choose collection and/or skills framework

Select all the skills common in any role, or select each skill individually

Discover new career opportunities

APS CAREER PATHFINDER

Search for roles

Explore roles Your career goals Log in

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Add skills individually or via roles

You can add skills by searching for a specific skill or a role which is a collection of skills

Search for a role or skill Organisations

- Acceptance testing Skill from the SFIA 8 framework
- APS6 APS5 Accessibility Practitioner Typical APS 8 skills
- EL2 Agile Coach Typical APS 5 skills
- Animation development Skill from the SFIA 8 framework
- Application support Skill from the SFIA 8 framework
- Applied Research Skill from the CIISec 2.4 framework
- Asset management Skill from the SFIA 8 framework
- APS5 APS4 Associate Business Analyst Typical APS
- APS5 APS4 Associate Software Engineer Typical APS

Save

Skills Interests Filters

More role demand

← Lower role classification

Security Architecture - Typical APS

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Software Engineering - Typical APS

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Help

Search for roles

Skills | Interests | Filters

5 Your skills

More relevant pathways

Higher skill match 100%
Lower skill gap

Design - Typical APS

APSS APS4 Design Officer 100% | EL2 Design Director 42%

User Research - Typical APS

APSS APS4 Junior User Researcher 100% | APS6 User Researcher 89% | EL1 Lead User Researcher 82% | EL2 User R

Research Ops - Typical APS

EL1 Research Designer 63% | APSS Research Support Officer 46% | APS6 APSS Quantitative Resear

Service Design - Typical APS

APS6 Service Designer 56% | EL2 Service Design Director 36% | EL1 Lead Service Designer 3

Interaction Design - Typical APS

EL1 Lead Interaction Designer 47% | APS6 Interaction Designer 45%

User Interface Design - Typical APS

APS6 Senior User Interface Designer 34% | APSS APS6 User Interface Designer 23%

Content Strategy - Typical APS

Less relevant pathways

Your skills

Export | Edit | Add more skills

Search list

- User experience evaluation | Level 2
- User research | Level 3
- User experience design | Level 4
- Research | Level 4
- User experience analysis | Level 4

Levels describe how to recognise capability at various degrees of competence/responsibility and are specific to each framework. Some skills are not recognised at all levels. Skills frameworks used are the SFIA and ATO skills framework

Explore roles that need your skills

Adjust your level of skill

Help

Career Pathfinder
https://aps-career-pathfinder.digitalprofession.gov.au

Search for roles

Explore roles Your career goals Log in

Skills Interests Filters

3 Your interests

More interest matches

Lower role classification

Incident Response - Typical APS
APSA Incident Responder 36% APSS Incident Responder 30% EL1 Lead Incident Responder

Intrusion Analysis - Typical APS
APSA Intrusion Analyst 59% APSS Intrusion Analyst 58% EL1 Lead Intrusion Analyst

Research Ops - Typical APS
APSA APS3 Junior Research Analyst 8% APSS APS6 Quantitative Research Analyst 14%

User Research - Typical APS
EL1 Quantitative Researcher 13%

Business Analysis - Typical APS
APSS APS4 Associate Business Analyst 0% APSS APS6 Business Analyst 0% EL1 Lead Business Analyst 0% EL1 Senior Business Analyst

Systems Analysis - Typical APS
APSS Associate Systems Analyst 0% APSS APS6 Systems Analyst 0% EL2 Lead Systems Analyst 0%

Digital Testing - Typical APS
APSS APS4 Junior Automation Tester 0% APSS APS6 Automation Tester 0% EL1 Senior Automation Tester 0%

3 interest areas

You can add interests to focus on particular career fields

AI APIs Accessibility Agile Analysis Architecture
Automation Business Cloud Code Content Cyber Security
Data Delivery Design DevOps Development Empathy
Encryption Engineering Ethics Forensic Graphics
Infrastructure Interface Management Networks Pega
Performance Platforms Problem solving Programming Projects
Quality Research Risk Robotic/Bot Software Strategy
Systems Technical Testing User Experience User Experience
Visualisation Web

Help

Explore roles based on your interests

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APS6

Automation Tester

Automation Testers construct automated tests which confirm that systems and services function appropriately, and they validate the environment in which these things operate to make sure test results are valid.

[Day in the life of a Automation Tester](#)

78% You have most of the skills needed for this role

How do I upskill?

Learn more about this role

Search APS jobs

Add to plan

Add you your career plan

Essential

Skills to have before applying for a role like this

✓ Matched skills

Methods and tools Level 3

↑ Skills level needs uplift

+1 Programming/software development Level 3

+1 Testing Level 4

✗ Missing skills

Specialist advice Level 4

Desirable

Skills that can be learnt on the job if necessary

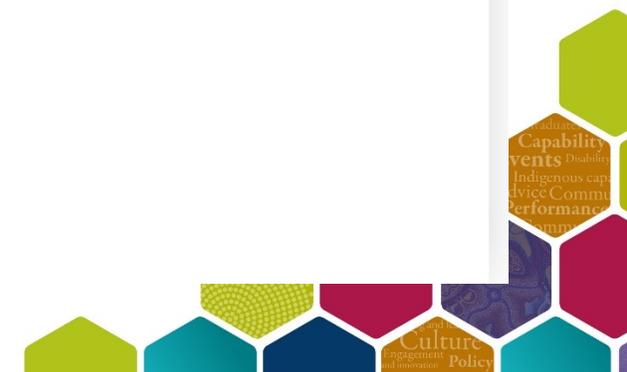
✓ Matched skills

Systems integration and build Level 2

✗ Missing skills

Acceptance testing Level 4

See your skill gap



14 Your skills ^

Your skills

Export Edit Add more skills

Search list

- Stakeholder relationship management Level 5
- Consultancy Level 6
- Business modelling Level 2
- Professional development Level 4
- Organisational facilitation Level 4
- Strategic planning Level 5
- Intelligence Level 3
- Assessment Level 6

I'm open to opportunities. [Learn more.](#)

8% EL1 Research Designer 15% APS5

Analyst 22% EL1 Senior Business Analyst

27% APS6 Scrum Master 11%

Architect 25% EL1 Junior Business Architect

Information Architect

Owner 23%

Register and login in
to be discovered for
opportunities



Find people with any combination of skills

Select skills to begin searching for talent

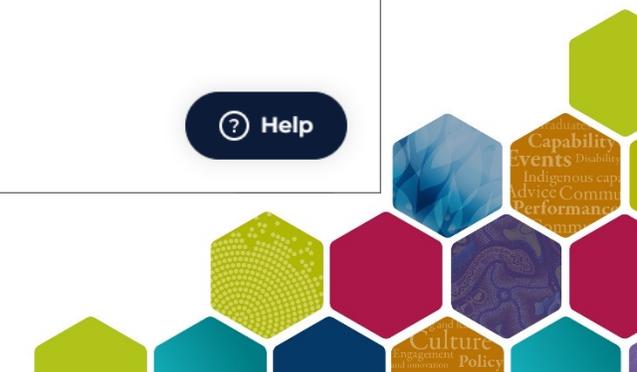
Add skills

Find talent within your organisation

Download a full skills inventory (de-identified)

↓
Or download your organisation's complete skill database.
Note that names and email addresses of individuals are not included in this download.

Help



Career Pathfinder x +
https://aps-career-pathfinder.digitalprofession.gov.au

Australian Government | APS CAREER PATHFINDER

Find talent | Explore roles | Your career goals | Log out

Find talent

Searching for talent within all organisations. [Learn more.](#)

6 active skills

- Competency assessment Level 3
- Methods and tools Level 3
- Stakeholder relationship management Level 4
- Performance management Level 4
- Employee experience Level 4
- Specialist advice Level 4

16 search results | 3 selected people | [Export 16 search results as CSV](#)

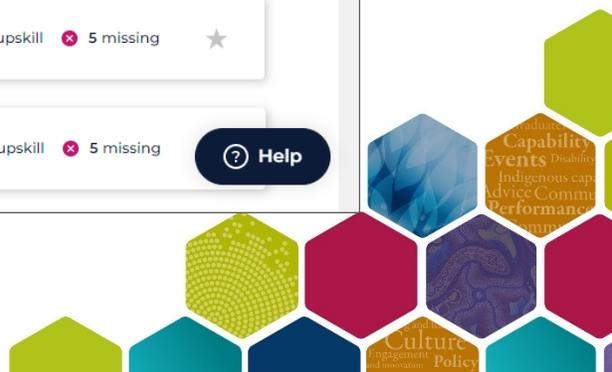
[Redacted]	4 matched	0 need upskill	2 missing	★
[Redacted]	4 matched	0 need upskill	2 missing	★
[Redacted]	3 matched	0 need upskill	3 missing	★
[Redacted]	2 matched	0 need upskill	4 missing	★
[Redacted]	2 matched	0 need upskill	4 missing	★
[Redacted]	1 matched	0 need upskill	5 missing	★
[Redacted]	1 matched	0 need upskill	5 missing	★

[Help](#)

Skills we are looking for

Export results

Search results



Questions?

Please let us know what you think

<https://digitalprofession.gov.au/aps-career-pathfinder-tool>

Google search: APS Career Pathfinder

Contact us at: DigitalProfession@apsc.gov.au



Thank you.

