

eResearch Services and Capabilities

Advancing the Professionalism
of our eResearch Workforce

FAVeR Federation for the Advancement
of Victorian eResearch

Overview

FAVeR and APeRW Working Group

eResearch: Value Proposition & Value Chain

eResearch: Services & Capabilities

Capabilities: Processes and Infrastructure

FAVeR

Federation for the Advancement of Victorian eResearch

- Collaboration of the eight Victorian-based universities
- Vision: "To enhance the coordination of eResearch initiative across Victorian universities in order to improve access to and utilisation of eResearch services and infrastructure."
- Three current projects:
 - [Access to infrastructure – models that scale](#)
 - [Advancing the professionalisation our eResearch workforce](#)
 - [How to best engage with digital humanities research in Victoria?](#)

APeRW Working Group

Name: Advancing the Professionalism of our eResearch Workforce (APeRW)

Goal: Create a white paper that clarifies the roles within the eResearch workforce:

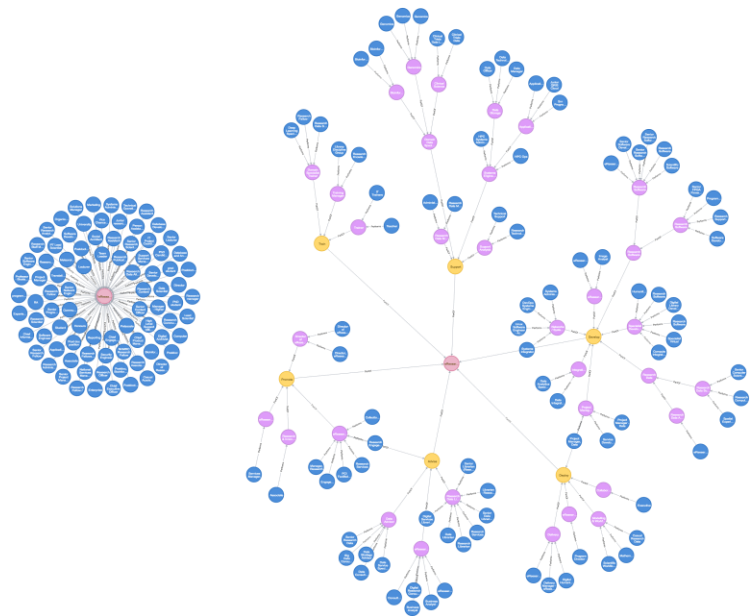
- **Scope** and **categorisation** of eResearch roles.
- **List of roles**, including high-level position descriptions for each role.
- **Career paths**, as links between roles.

APeRW Previous Work

Modelling Roles for eResearch

BoF Session (2018)

Presentation (2019) @ eResearch Australasia:



Services <<< Capabilities <<< Skillsets

Ongoing discussion and sharing of perspectives by FAVeR members

BoF Session @ eResearch Australasia 2020

What is eResearch?

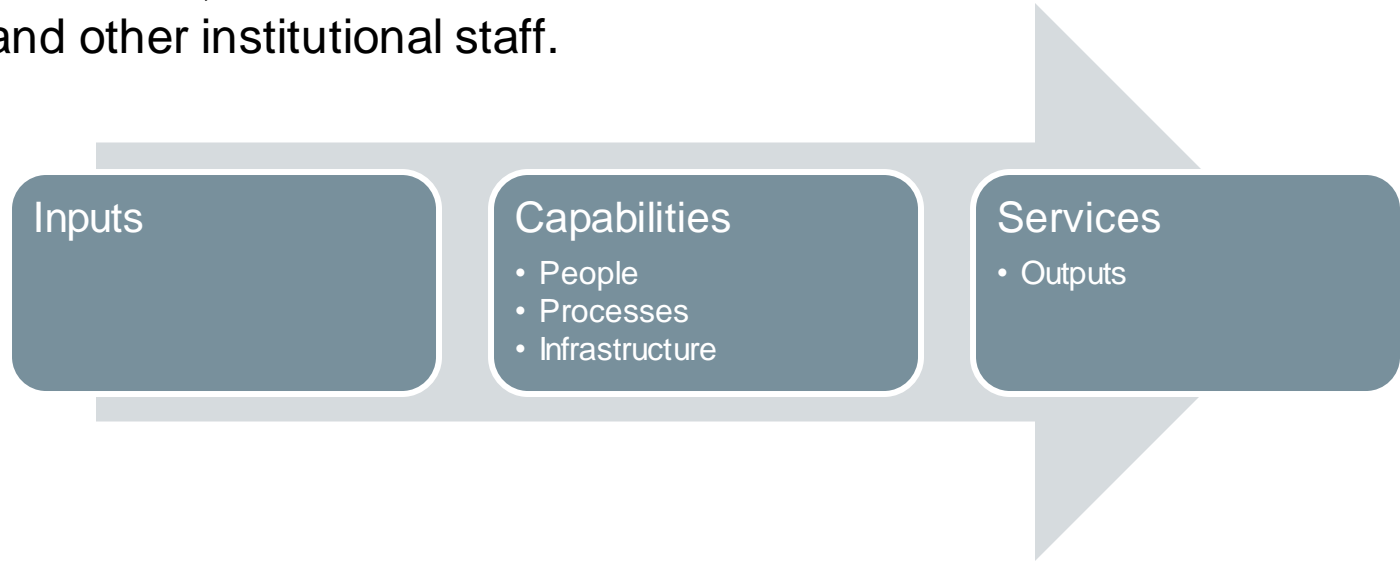
"The application of advanced computing and ICT across the research lifecycle."

Value Proposition of eResearch Workforce

"Research technology specialists can help by exploring, developing, and recommending appropriate solutions for diverse researchers, across the research lifecycle."

What are eResearch Services?

The outputs delivered by eResearch professionals that support, or enable, the eResearch activities of researchers and other institutional staff.



eResearch Services

Advise

- Provide Advice
- Triage Enquiries

Train

- Develop
- Organize Program
- Deliver

Promote

- Research Tech
- Services

Develop

- Advise
- Support
- Develop
- Refer

Deploy

- Research Tech
- Maintain Systems
- Support Bespoke Deployments

Support

- Research Tech
- Applications
- Platforms

eResearch Services

Advise

- Provide Advice
- Triage Enquiries

Provide advice on:

- appropriate technology solutions (internal and external)
- appropriate approaches
- application of RDM principles
- appropriate solutions for RDM

to support:

- data life-cycle
- computation
- grant applications
- ethics applications

Triage and referral of enquiries to other service units.

eResearch Services

Train

- Develop
- Organize Program
- Deliver

Skills Transfer through resource provision into active research projects.

Referral to external training materials and opportunities.

Develop, organise and deliver training for researchers:

- across various levels of expertise: awareness, introductory, intermediate, and advanced.

on:

- technical aspects of tools, software and platforms. e.g. python, R, HPC.
- techniques for data capture and analysis. e.g. data science
- RDM systems (internal and external)
- embedding technologies in the research life cycle
- onboarding for specialised laboratory equipment
- bespoke domain-specific platforms and technologies

eResearch Services

Promote available technologies and services to researchers through:

- community-driven engagement
- departmental training and events
- consultation as a service (with relationship management)
- consolidated catalogue of available services (internal and external)

Promote policies that impact research technologies. e.g. Research Data Management (RDM)

Promote

- Research Tech
- Services

eResearch Services

Develop bespoke project workflows and pipelines for:

- data Science
- domain specific data analysis
- etc.

Develop

- Advise
- Support
- Develop
- Refer

Provide advice about development within the institutional context on:

- feasibility and best practice
- policy and technologies
- software quality requirements
- RDM principles

Support the development of scripts and software:

- within research projects
- in collaboration with researchers

Develop research technology:

- specialist and bespoke solutions
- solutions to integrate research systems and services.

Referral to third party software development services.

eResearch Services

Deploy research **infrastructure**, technologies and systems within the institutional context.

Provide ongoing maintenance to research and data storage systems to:

- ensure currency of security patches.
- migrate to newer versions.
- include ad-hoc enhancements.

Support bespoke deployment for research technology provided through various platforms.

Deploy

- Research Tech
- Maintain Systems
- Support Bespoke Deployments

eResearch Services

Support key research **infrastructure**, technologies, applications and platforms:

- e.g. RDM and data storage
- across the research life cycle
- across institutional units (Library, Research Office, IT Services, etc.)

Provide access and manage allocations for technical research infrastructure.

Support

- Research Tech
- Applications
- Platforms

eResearch Services

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eResearch Capabilities

What is a capability?

- An expression of what a business does or can do.
- This can be the **People**, **Processes**, and **Infrastructure** required to transform inputs to outputs within the activities upon which service delivery depends.

Potential Capabilities: Training

- Training **Planning**: requirements elicitation and solution identification.
- Training **Organization**: program design and session planning.
- Training **Delivery**: deliver training to researchers.

eResearch Capabilities: Next Steps

What are the **Processes** and **Infrastructure** that support the delivery of these services?

We're inviting input from the community...

Google Form: <https://eresear.ch/caps-survey/>

APeRW Project Page...

<http://www.faver.edu.au/projects/advancing-the-professionalisation-of-our-eresearch-workforce/>

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