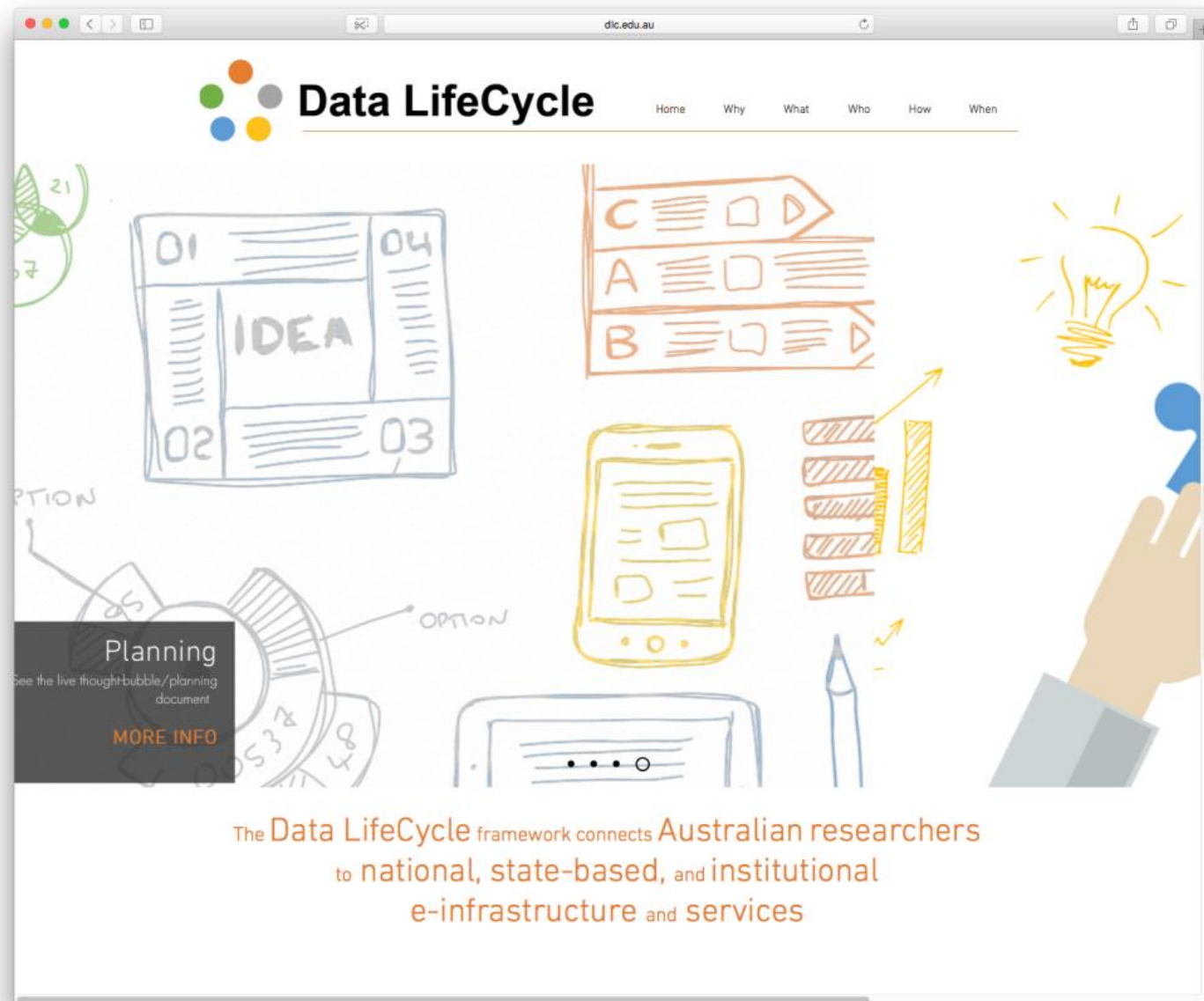


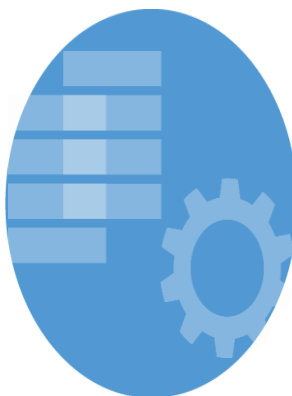
# What will you get from this talk?

- Whowhat?
- Why?
- Some background
  - DLCF & RAiD
    - towards a more connected environment
- What system are we developing?
- A few implementation choices explained

# What: [www.dlc.edu.au](http://www.dlc.edu.au)



# Who: Stakeholders & service areas



Repository storage /  
Curation services



Education /  
Data Publishing

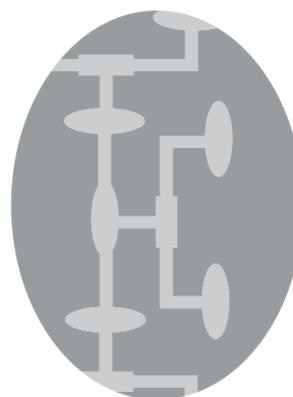


AUSTRALIAN  
ACCESS FEDERATION

Access /  
Authentication



Compute / Processing

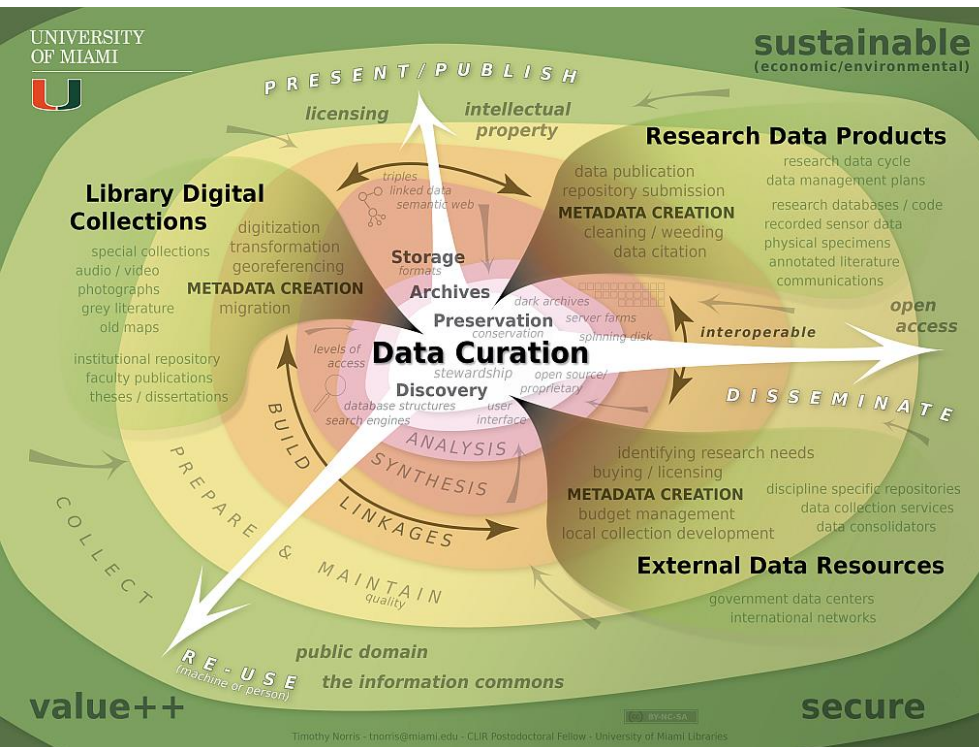


Networking /  
Synch&Share storage

# Why? Theory

vs

# Practice



Scatter data across multiple disks, thumbdrives and email, annotate freehand if at all; cospasta subsets and send them to collaborators for processing; if required and your funder really insists, at conclusion of project zip up all data and dump it in a dark repository, preferably without DOI

Rinse, Repeat...

**Why?**

# The implementation / uptake gap in “good data practice”

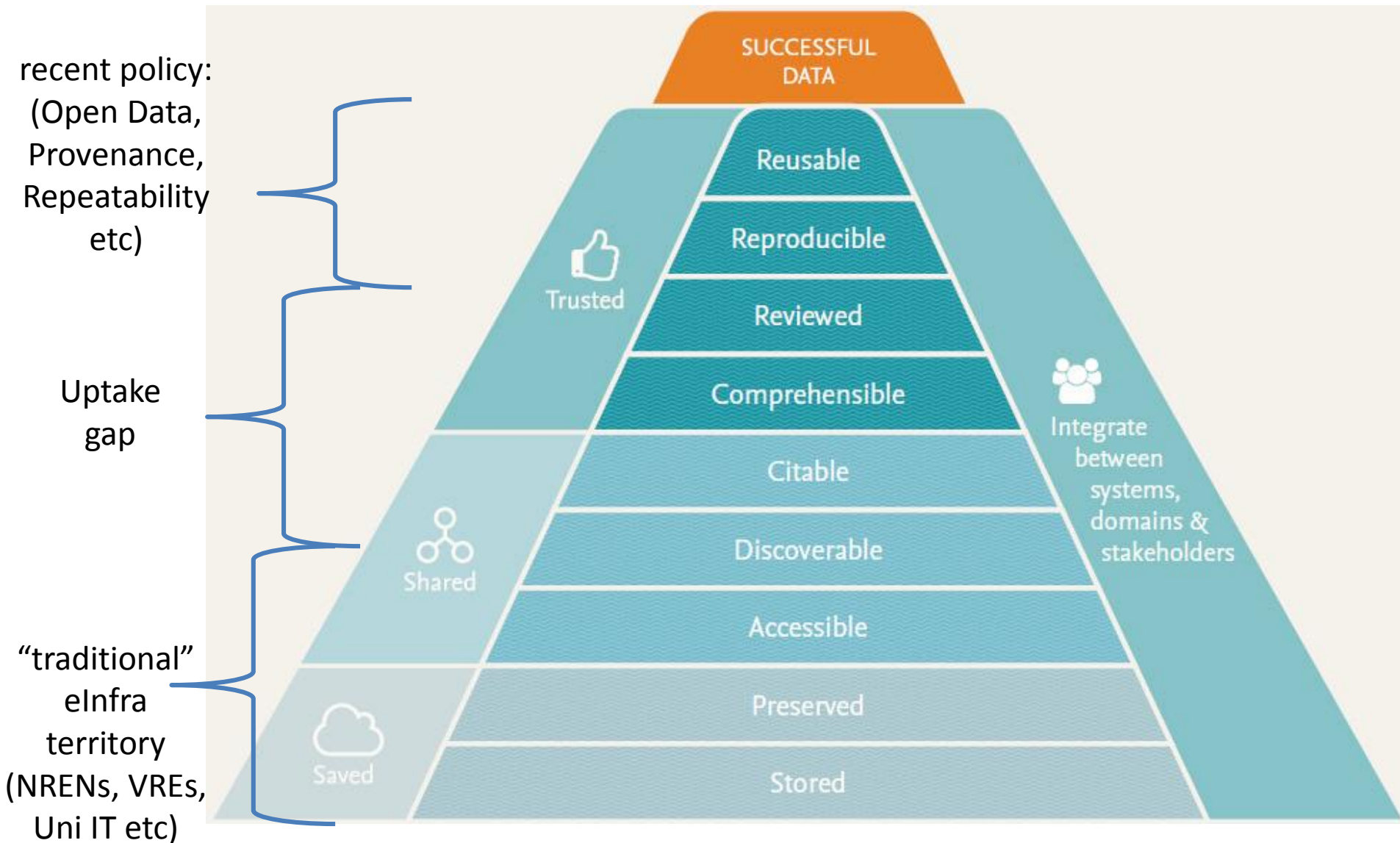
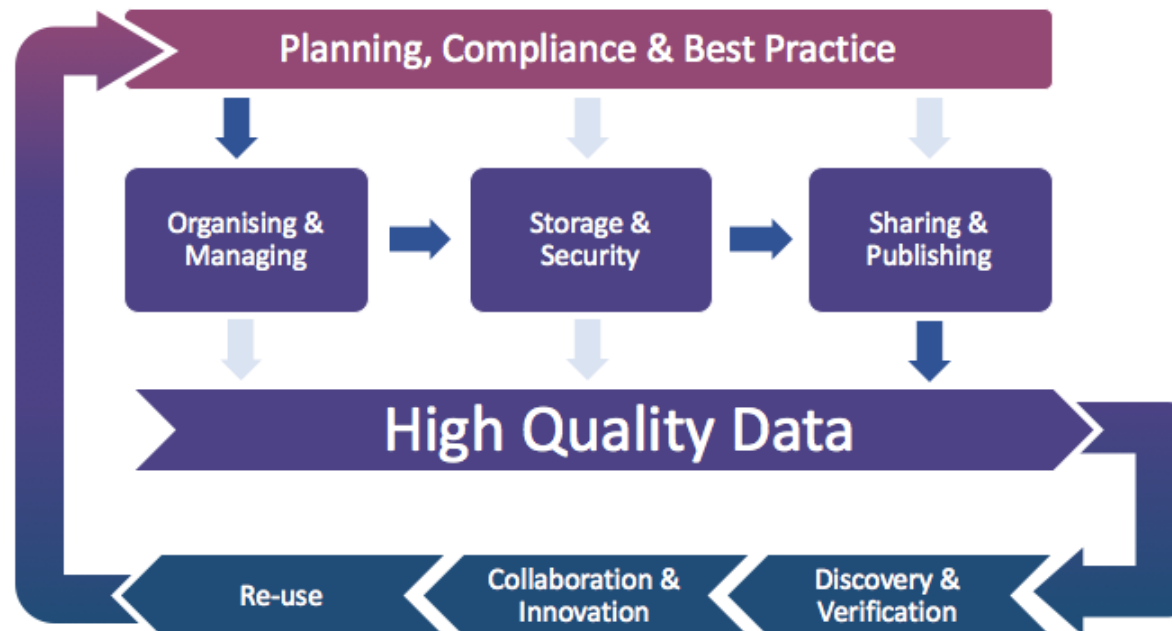


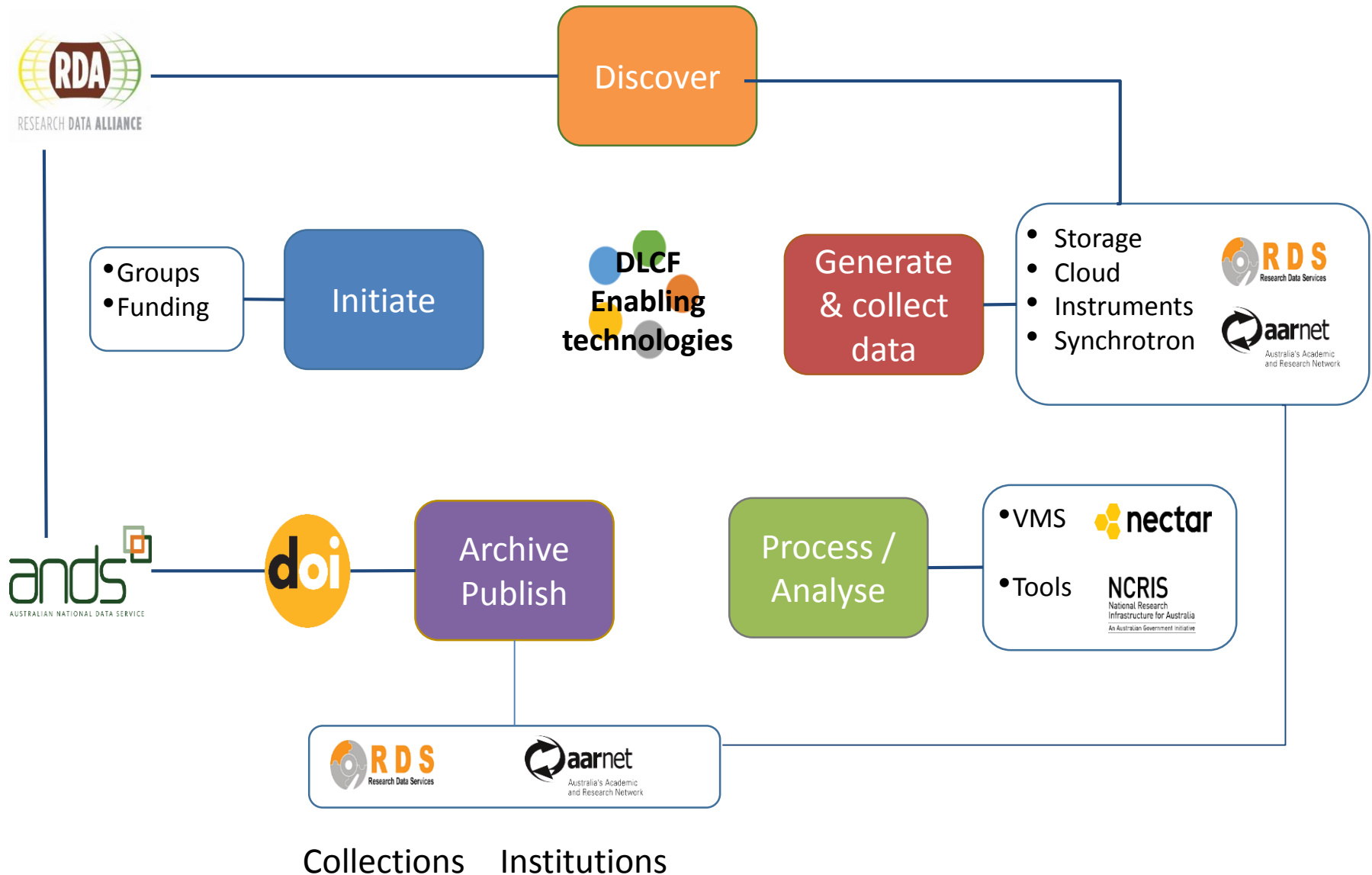
Image from De Waard et al.,

<https://www.elsevier.com/connect/10-aspects-of-highly-effective-research-data>

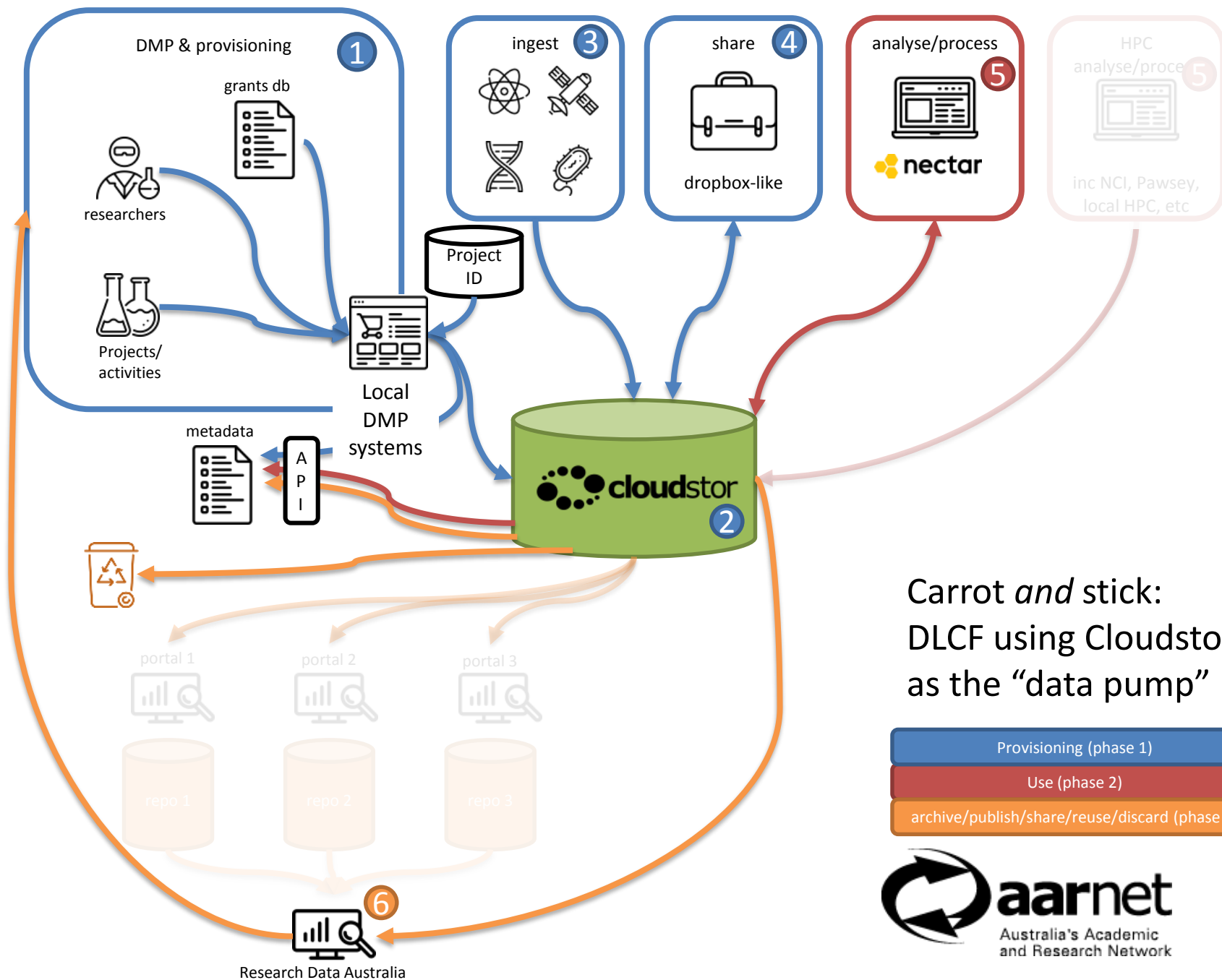
- Researchers require simple, easy-to-use infrastructure that is available to them at no cost, and that allows for best practice workflows with minimum administrative intervention
- Integrated institutional data management tools would ideally appear to researchers as one system that ‘closes the loop’ and enables efficient management of data throughout the entire data lifecycle



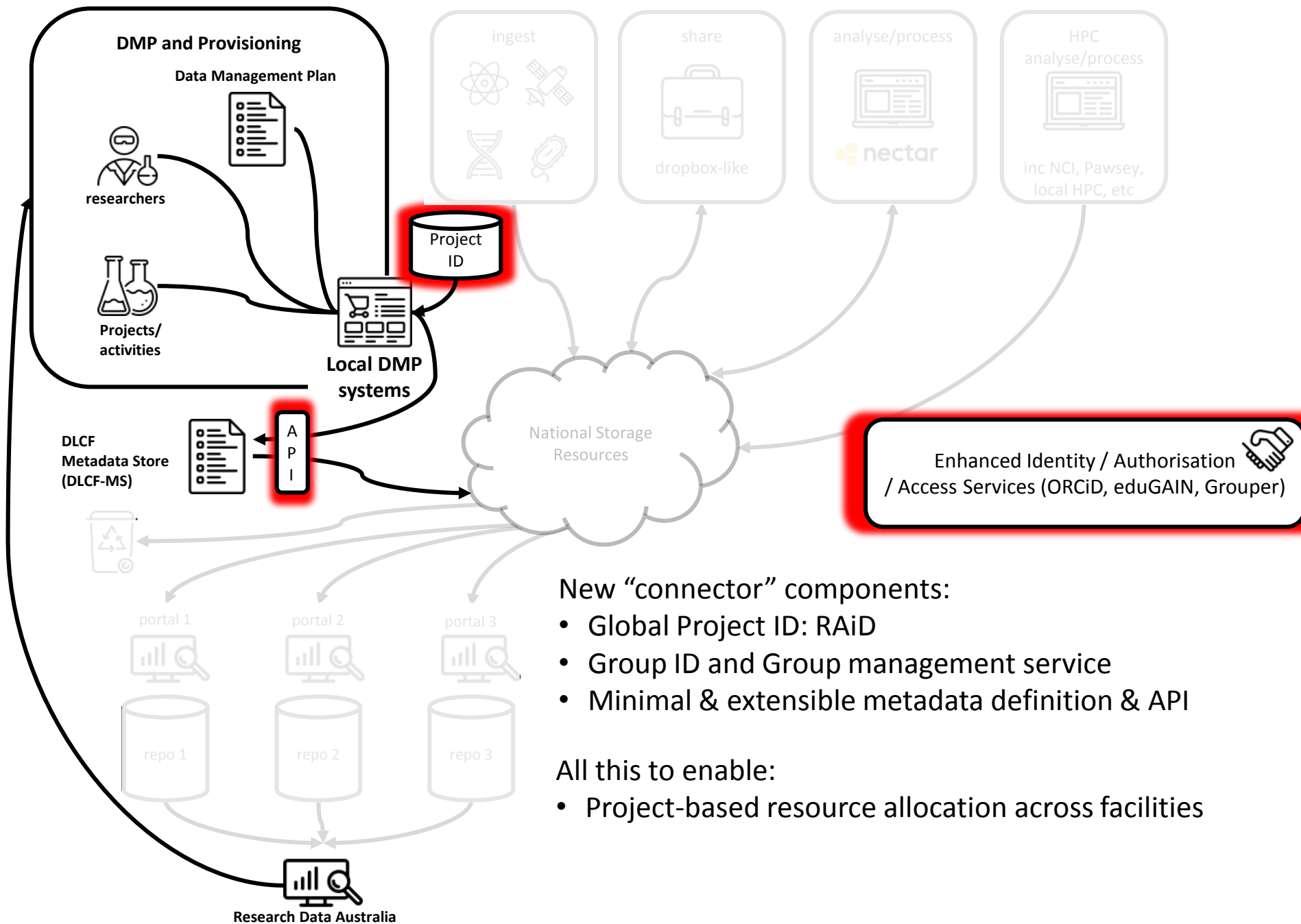
# Therefore, intent: “DLCF Connects Processes and Infrastructure”











# What's those RAiD and GiD?

Cloud based connectors and iDentifiers for research data, tools, storage and outputs

## Research Activity Identifier (RAiD)



- Handle PID
- RAiD API
- RAiD DMR containing Metadata related PID's
  - Doi, Orcid, RAiDS, GiDs, Tool and Service ID's

## Group ID and Group Management service (G.iD)



- Federated Access
- Provisioning of storage
- Audit trail for group

# RAiD: A PID for projects



## RAiD functions:

- Audit mechanism
- Records resource usage and location
- Records group members and access
- Associates institutions with project activity

## RAiD Technology

- REST API
- Handle PID
- RAiD Metadata Manifest
  - Project Metadata
  - Related PIDs
  - Resource ID's

# Anatomy of a RAiD

RAiD Number

RAiD DMR

# 3.1010/463  
Service Point  
D/M/YY



# D/M/YY

— Group ID

- Emails
- Orcids



# D/M/YY

— DOI

- Publications
- Data Sets



# D/M/YY

— Grid/NSNI

- Related institutions



# D/M/YY

— Tools

- VMs, synchrotron &c



# D/M/YY

— Services

- Storage
- Processing



# D/M/YY

— Related projects

You're done. Stop talking ;)

Thanks for your attention,

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