



# A Principles Aligned Institutionally-Contextualised (PAI-C) RDM Educational/Training experience

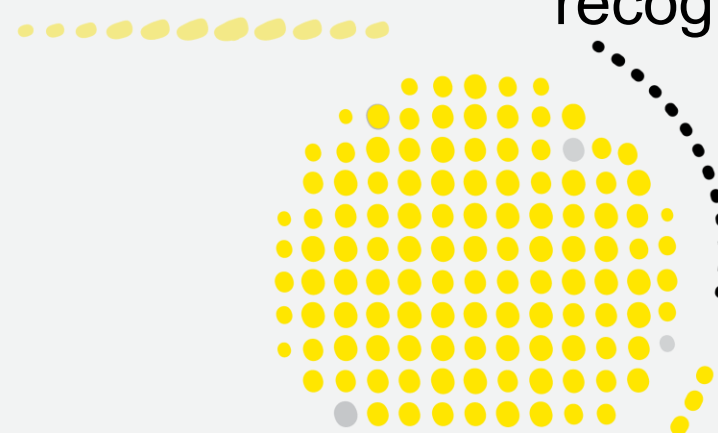
A Joint Pilot Project by:

- Australian Research Data Commons
- University of New South Wales
- University of Sydney
- Bond University
- University of Canberra
- Charles Darwin University
- Curtin University
- Deakin University
- Griffith University




# ACKNOWLEDGEMENT COUNTRY

I acknowledge the Traditional Custodians of the land on which the Brisbane Convention & Exhibition Centre now stands.



I pay my respects to Elders past and present, and recognise their enduring contribution to the culture and spirit of the land.

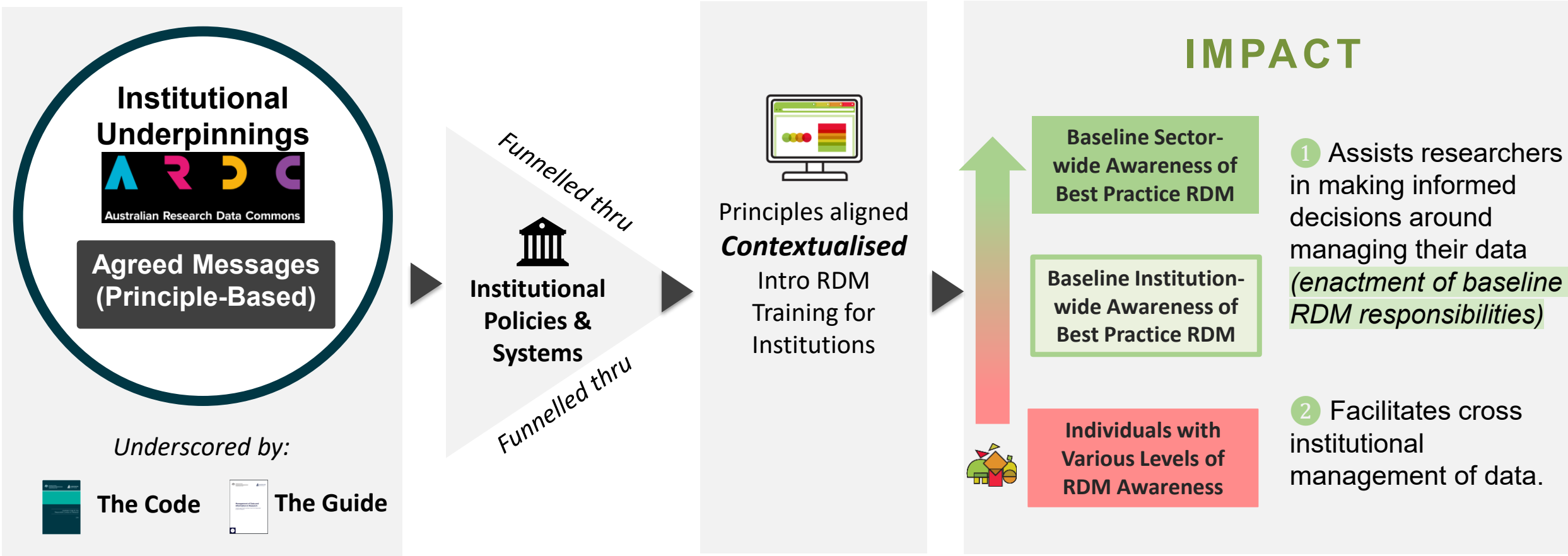




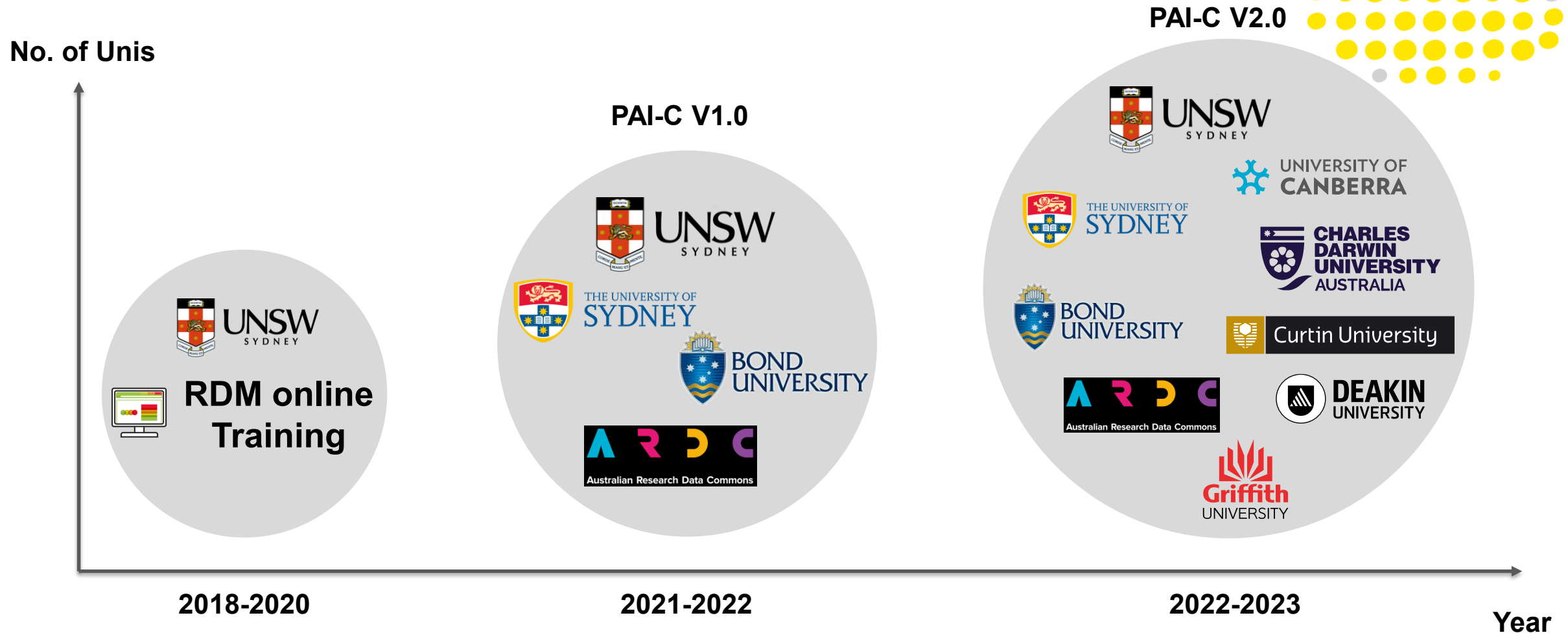
## Outline

- Context Setting
- PAI-C Pilot Testing
- PAI-C, More than Training
- Future of PAI-C

# A Principles aligned Institutionally-contextualised (PAI-C) RDM educational/training experience



# PAI-C: The Origin Story



# PAI-C Intro RDM Experience



Demonstratable  
Outcomes

Complete Quizzes

Start RDM Planning

Complete Survey



Target Group

- New Higher Degree Research (HDR) Candidates



Focus

- Introductory Content



Objectives

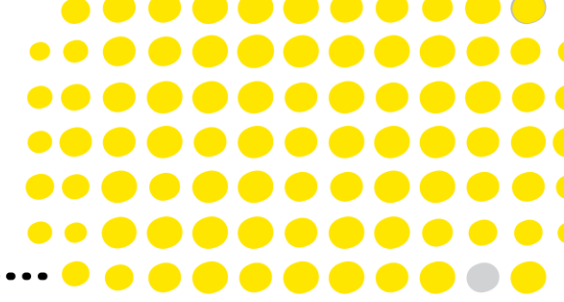
- Start thinking about RDM
- Enacting RDM best practices relevant to their early project phase

## Structure

 75 to 90 mins

- Section 1:** Overview of RDM and Expectations
- Section 2:** Overview of Data Classification
- Section 3:** Data Classification Case Studies
- Section 4:** University-supported Data Platforms
- Section 5:** Data Handling Case Study I (Secure Storage & Backing-up)
- Section 6:** Data Handling Case Study II (Data Retention)
- Section 7:** RDM Planning (starting an RDMP)
- Section 8:** Reiterating key RDM expectations and next steps

# PAI-C Intro RDM Experience



**Demonstratable Outcomes**

**Target Group**

**Focus**

**Objectives**

**Survey**

**75 to 90 mins**

**& Backing-up)**

**early project phase**

**Section 8: Reiterating key RDM expectations and next steps**



**PAI-C Details can be found on DReSA**



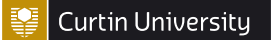







# PAI-C PILOT TESTING



# PAI-C Pilot Testing ( $n = 125$ )

## Learning Management System

	<b>Moodle</b>
  	<b>Blackboard</b>
  	<b>Canvas</b>
	<b>D2L</b>

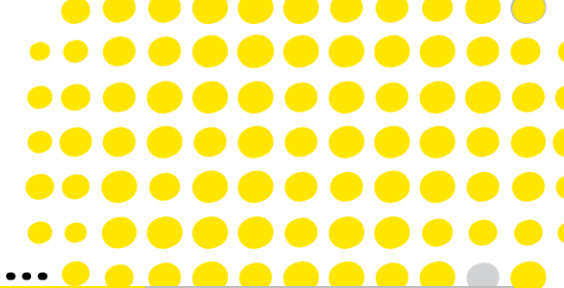
## Pilot Testing Process

*Tool = iSpring/Articulate*

1. HDR Participants given 90 mins to complete PAI-C on LMS
2. Complete End-of-Module Survey
3. Focus Group Discussion

# Survey Findings ( $n = 125$ )

HREC Approval No: HC210466



## Quality of PAI-C Experience

	Overall		Original 3 Unis		IU Ext. Unis	
	Mean	SD	Mean	SD	Mean	SD
1. The aims of this module were clear to me.	1.24	0.45	1.22	0.42	1.26	0.48
2. The content in this module was organised in a clear and logical way.	1.33	0.62	1.33	0.59	1.32	0.65
<b>3. The principles from this module can be applied to my research project(s)</b>	1.30	0.53	1.38	0.57	1.23	0.46
4. This module changed the way I think about research data management.	1.72	0.89	1.72	0.83	1.74	0.96
<b>5. This module was helpful in getting me thinking about how I can align my research project(s) to research data management best practices.</b>	1.38	0.62	1.39	0.60	1.37	0.63
6. This module was helpful in completing the mandatory fields of my RDM plan.	1.59	0.75	1.48	0.70	1.73	0.79
7. The module was able to engage me most of the time.	1.63	0.78	1.61	0.77	1.65	0.79
<b>8. Overall, I am satisfied with the quality of the module.</b>	<b>1.43</b>	<b>0.58</b>	1.46	0.58	1.38	0.58

6-point Likert Scale: 1-Strongly Agree to 6-Strongly Disagree

# RDM Knowledge and Understanding

	Overall		Original Unis		IU Ext. Unis	
	Mean	SD	Mean	SD	Mean	SD
1. I acknowledge I have research data.	1.16	0.37	1.12	0.32	1.20	0.40
2. I am confident of <b>classifying research data</b> in accordance with the University data classification policy	1.57	0.60	1.52	0.53	1.61	0.66
3. I have started thinking about if I should make some of my research data publicly available.	2.11	1.12	2.22	1.26	1.95	0.91
4. I know I must store my research data on systems that are appropriate for their data classifications	1.16	0.41	1.13	0.38	1.19	0.44
5. I know I should <b>use University-supported platforms</b> for all research projects, unless the projects have special data requirements that cannot be met by University-supported platforms.	1.18	0.42	1.16	0.44	1.19	0.40
6. I know how to submit an RDM plan (RDMP) on University RDMP platform.	1.67	0.76	1.45	0.65	1.89	0.81
7. I am confident of <b>determining the minimum data retention period</b> for my research data.	1.68	0.75	1.65	0.74	1.69	0.76
8. I know I must ensure that I have <b>a copy of my research data stored on a University-support retention platform before leaving the University.</b>	1.34	0.62	1.24	0.46	1.44	0.74
9. I know I must have regular RDM conversations with my supervisor(s).	1.49	0.71	1.46	0.74	1.50	0.67
10. I know I can <b>contact [University RDM contact] for RDM assistance</b>	1.16	0.42	1.13	0.42	1.18	0.43

**6-point Likert Scale: 1-Strongly Agree to 6-Strongly Disagree**

# Qualitative Data (241 codes)

40%

## Key PAI-C Takeaways

Data Classification

Data Handling

Data Retention

Data Publication

RDM Plan

RDM Support Channel

30%

## Design

Easy to Understand

Clear Logical Structure

Interactive (Engaging)

Good Language/Tone

Self-Paced

13%

## Case Studies

Key Feature

Relatable

Relevant

17%

## Helpful/Useful

Felt Comprehensive

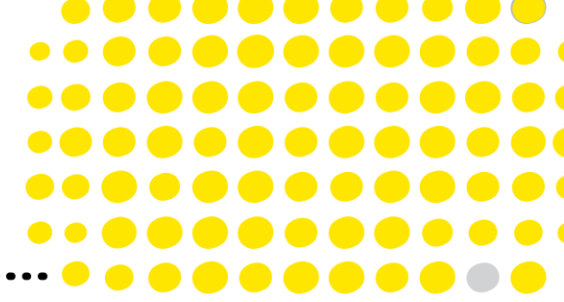
Helpful Hyperlinks

Helpful

Useful

Refresher

# Qualitative Data (76 codes)



## Design

More Cases

Too Wordy

Add Audios/Videos

Colour Scheme

Layout

Structure/Sequencing

## Technical

iSpring

Articulate

LMS Deployment

## Framing

Context Setting

RDMP Section

Questioning

## Additional Info

Data Platforms

Special Data

Supervisor Access



# PAI-C, MORE THAN RDM TRAINING



# PAI-C Participatory Design Process



Adapted from  
Chew et al.  
(2022)

## People Involved:

- Project Coordinator/Academic Lead
- Uni Representative
- Project Officer/RA
- Uni RDM Stakeholders
- End-Users

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## People Involved:

- Project Officer/RA
- Uni LMS Team



## People Involved:

- Project Coordinator/Academic Lead
- Uni Representative
- Project Officer/RA
- Uni RDM Stakeholders (mainly sources of information, and assistance for contextualisation)

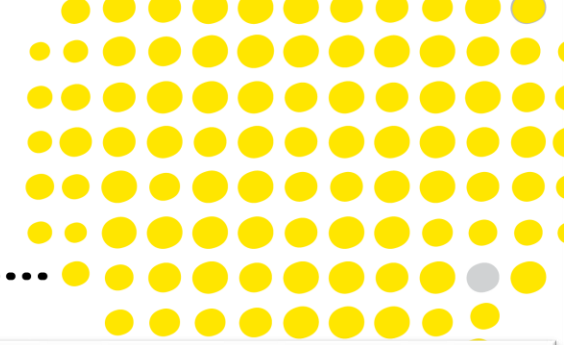
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- Project Coordinator/Academic Lead
- Uni Representative
- Project Officer/RA

# Co-Design Process - Snapshot



Principles Version

UNSW PAI-C

Sydney PAI-C

Bond PAI-C

Canberra PAI-C

CDU PAI-C

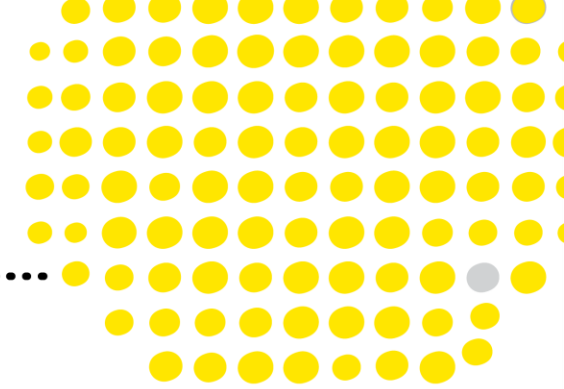
Curtin PAI-C

Deakin PAI-C

Griffith PAI-C



# Key Assets Produced/Required



## Data Classification

## Data Storage

## Data Retention

# PAI-C Reflections by Unis



The development and design of the PAI-C educational/training experience **catalysed important conversations about RDM with various university internal stakeholders**. This process helped pave the way toward **alignment of institutional RDM policies, infrastructure, and understanding**... [e.g.,] revealed that although the policies outlined correct processes and provision of appropriate infrastructure, they were **not yet correctly implemented and executed**... [e.g.,] the CDU RDM team, **in collaboration** with ITMS, the Menzies Institute and the Information Governance Architect, created Data Classification, Storage and Data Retention guides.



Bridging the gap between researchers' needs and institutional support is critical in the age of digital data. The PAI-C initiative **unifies researchers and institutions' RDM journeys to support digital data**. For researchers, PAI-C provides intuitive and streamlined training and education in minimum RDM requirements, as well as how to engage in the institution's own tools and processes. Institutions develop this minimum (baseline) **by "filling in the blanks" of the PAI-C template with their own systems; if not, institutions are provided the knowledge of where their gaps are**, and PAI-C supports closing these gaps, e.g. to update or create policies or procedures, to meet minimum standards.



# PAI-C Reflections by Unis



By involving stakeholders from different groups within the university, a significant benefit has been achieved in terms of fostering **a consistent message about RDM**... resulted in a **unified understanding and communication of RDM** principles and practices... involving stakeholders has successfully **identified existing gaps in RDM practices** within Griffith University... laying the foundation for targeted interventions and initiatives **to address these gaps** comprehensively. This initial phase of stakeholder engagement has provided valuable insights and **paved the way for future actions aimed at strengthening RDM practices** across the institution.



Curtin University

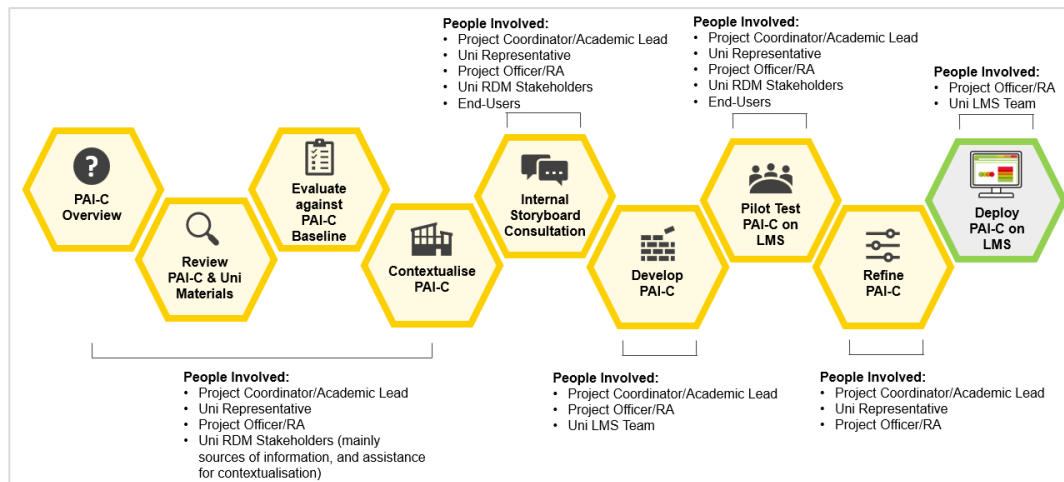
... the classification of research data according to our **Information Security policy, which covers all university information, can be difficult to apply to research data**. The process of developing and designing the PAI-C training involved initially **mapping data classification levels to the information security classification levels**, which went out for stakeholder feedback. The version that was pilot tested used the information security classification levels only, however the initial **mapping of classifications and resulting conversations have informed the policy review process**.

# PAI-C Reflections by Unis



PAI-C helped the RDM Taskforce **bring key stakeholders together from various portfolios across the University** to work on a tangible deliverable on RDM. The Taskforce used PAI-C as a springboard to **foster a sharing understanding of RDM** and **build cross-institutional collaboration** at Deakin. This was reflected in the collaborative approach we took in **developing three key documents**: the Deakin Research Data Security Classification, Deakin Research Data Retention Period Classification, and Deakin Research Data Storage Guide.

# PAI-C Participatory Design Process



Adapted from  
Chew et al. (2022)

## PAI-C, More than RDM Training

1. 'Same Same, and Different'
2. Consensus Building around RDM enablers
3. Alignment of Policy, Processes & Systems (& Gaps Identification)

# What's Next? Sustaining PAI-C

[Framework for Sustaining a Principles Aligned Institutionally-Contextualised \(PAI-C\) Research Data Management Training \(RDM\) as a Baseline RDM Training for Australian Universities](#)



## Key Considerations



## The PAI-C Framework

1. What enablers are needed for other universities to adopt PAI-C?
2. Which universities have adopted PAI-C?
3. How is PAI-C being used across universities?
4. Who should be reviewing PAI-C based on an agreed review cycle?
5. If there are changes to PAI-C (e.g., from V1.0 to V1.1 or V2.0), how should the changes be communicated to universities who have adopted PAI-C?
6. What are the current supplementary (i.e. non-baseline) components/areas/topics for PAI-C?

Facilitating PAI-C Adoption

Tracking PAI-C Adoption & Impact

PAI-C Community of Practice

RDM Training Syllabus

# Sustaining PAI-C

[Framework for Sustaining a Principles Aligned Institutionally-Contextualised \(PAI-C\) Research Data Management Training \(RDM\) as a Baseline RDM Training for Australian Universities](#)



## Key Considerations

1. What end goals do you have for your university?
2. Which university is leading the effort?
3. How is PAI-C being implemented in your university?
4. Who should be involved in developing an agreed baseline?
5. If there are changes from V1.0 to V2.0, who has the authority to make changes?
6. What are the current supplementary (i.e. non-baseline) components/areas/topics for PAI-C?

## The PAI-C Framework

### BoF Session

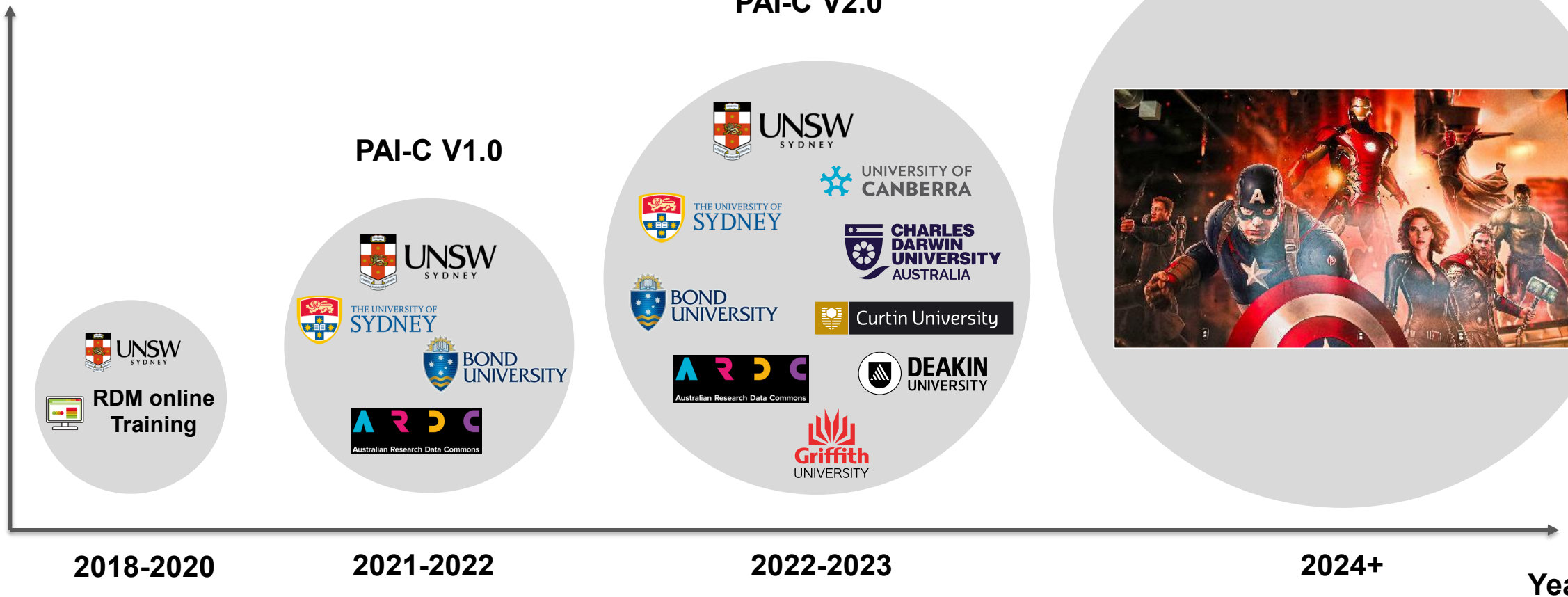
Towards National Consensus: Sustaining an Australian-wide Baseline RDM Training

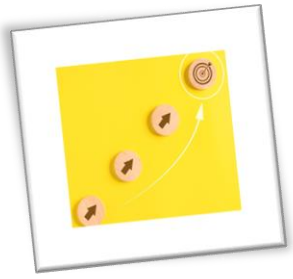
Boulevard Room (18 Oct)  
3.50 pm

RDM Training Syllabus

# PAI-C: The cinematic universe

No. of Unis





# Project Team

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