



Building EcoCommons Australia - The Good, The Bad and The Ugly



Dr Elisa Bayraktarov, Program Manager

eResearch Australasia 19 Oct 2023



ecocommons.org.au



@EcoCommonsAus



Acknowledgement of country

EcoCommons Australia acknowledges the Traditional Custodians of the land on which we are meeting and pays respect to the Elders, past and present, and extends that respect to all Aboriginal and Torres Strait Islander people.



EcoCommons Australia is a joint initiative of the Australian and Queensland Governments and is supported by the Australian Research Data Commons (ARDC). The ARDC is funded by NCRIS

Our partners



UNSW
SYDNEY



MACQUARIE
University
SYDNEY · AUSTRALIA



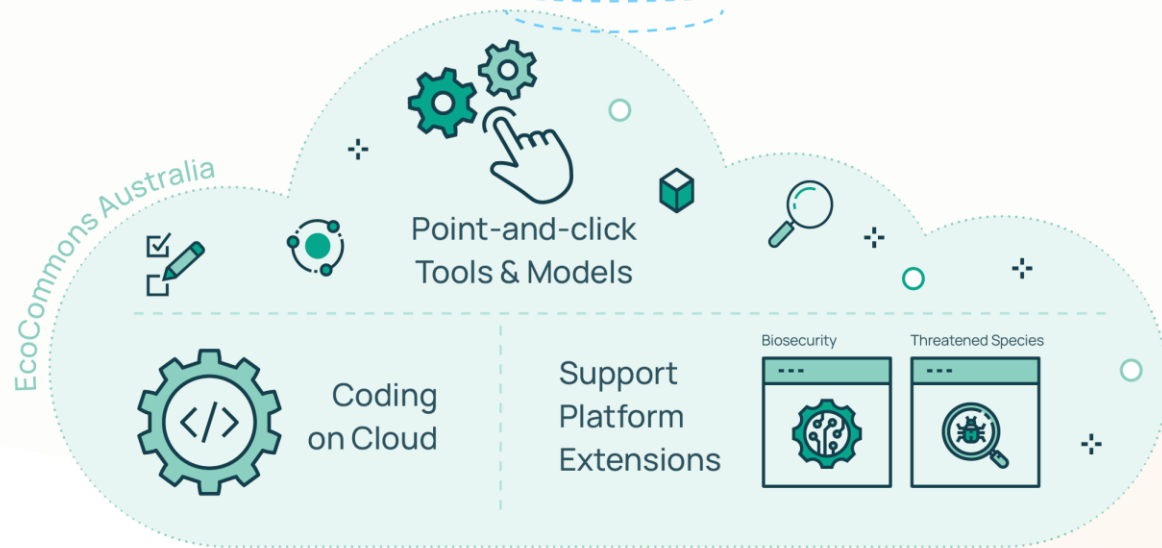
Queensland Government



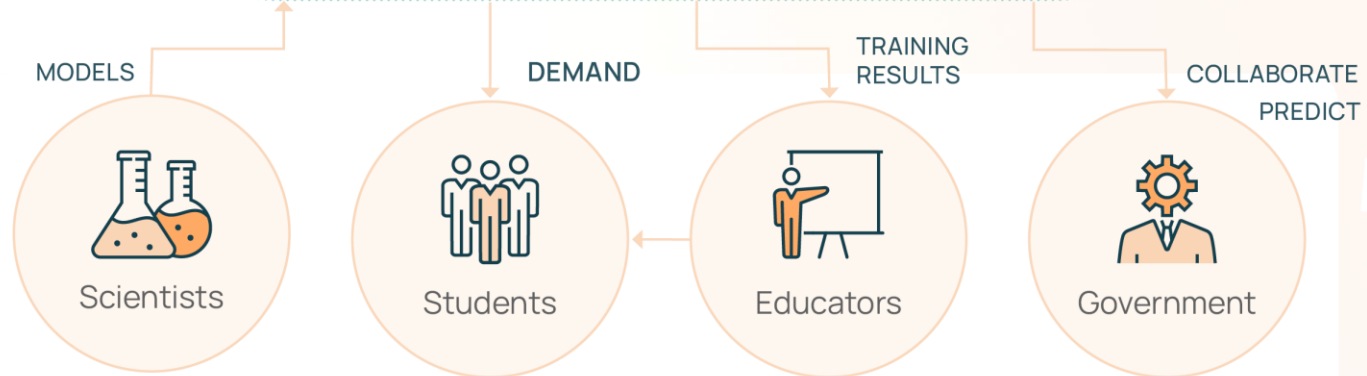
Data



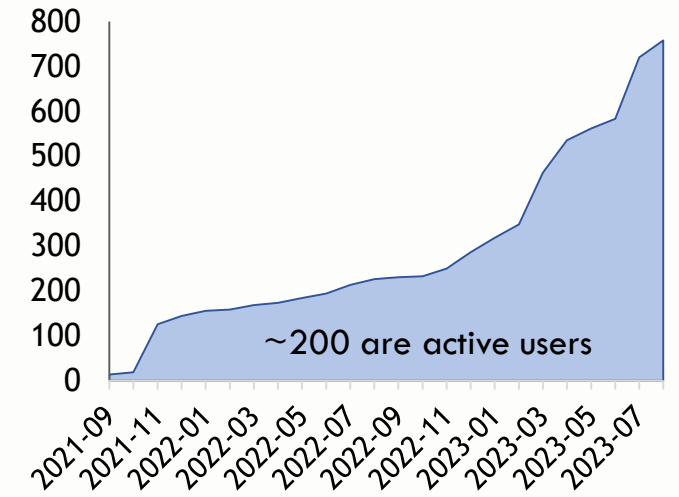
Platform



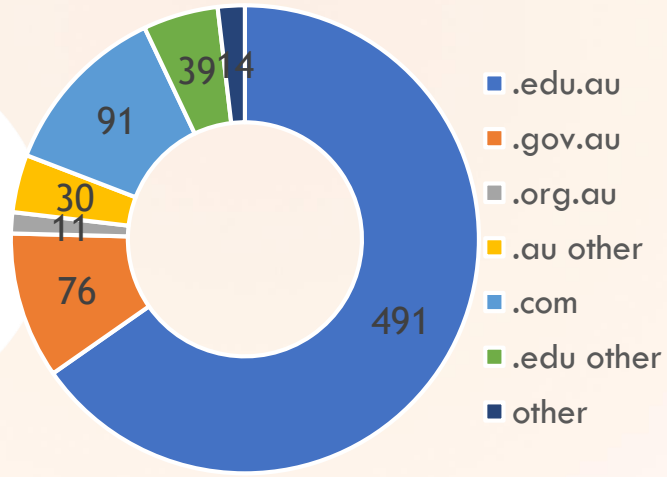
Community



EcoCommons User Growth



- Time Saving
- Trust
- Reproducibility



EcoCommons launch in Nov 2022

ESA-SCBO 2022

28 November – 2 December 2022 | Wollongong NSW



About ESA-SCBO 2022 Program information Call for Symposia Registration Sponsorship and Exhibition



- Scientific Symposium (~40 ppl)
- 3x Trainings (~70 ppl)
- Public Launch Event (~150 ppl)



Awards and Recognition



Award No. 1

Update



EcoCommons Australia Program Manager Dr Elisa Bayraktarov wins Women in Technology Award

Sep 23, 2022

EcoCommons Australia is proud to announce that our Program Manager, Dr Elisa Bayraktarov, has won the Digital Mover and Shaker Award at the 2022 Women in Technology (WiT) Awards Gala in Queensland....



Award No. 2

Update



EcoCommons Australia and Biosecurity Commons win CAUDIT Award

Oct 17, 2022

EcoCommons Australia and Biosecurity Commons have proudly won the Excellence in Research Support award at the 2022 Council of Australasian University Directors of Information Technology (CAUDIT)...



Award No. 3



EcoCommons Australia @EcoCommonsAus · Dec 7

We're highlighted in the @Griffith_Uni 2022 SDG Impact Report for our CAUDIT Award which demonstrates how @ecocommonsau and @biosec_commons are contributing to the University's commitment to the UN's Sustainable Development Goals: griffith.edu.au/_data/assets/...

EcoCommons Australia and Biosecurity Commons platforms recognised with CAUDIT awards

Two Griffith University projects won awards at the 2022 Council of Australasian University Directors of Information Technology (CAUDIT) Awards



Challenges

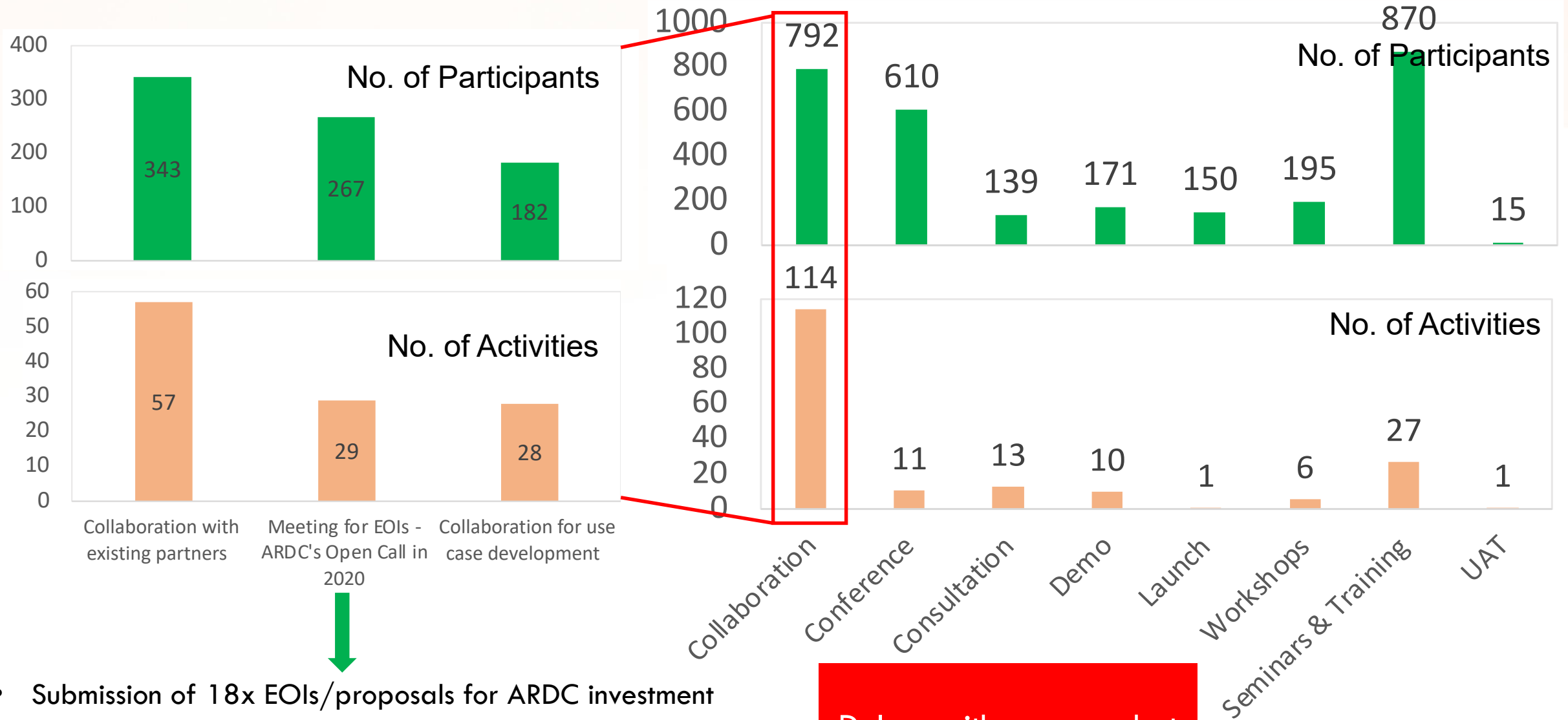


Challenge No 1:

**Collaboration is costly –
time & resources**



Challenge No 1: Collaboration is costly – time & resources



- Submission of 18x EOIs/proposals for ARDC investment
- Only 6x were successful through ARDC
- 1x successful through Department of Defense

Delays with core product development: ~3 months



Challenge No 2:

Retention of staff through Covid-19

Challenge No 2: Retention of staff through Covid-19

Our team in 2020/21

Meet the amazing people working to bring EcoCommons to life



Elisa Bayraktarov
Program Manager



Arve Solland
Tech. Lead & Solutions
Architect



Amanda Buyan
Data Analyst



James Li
Web Designer & Developer



Diego Guillen
Senior Software Engineer



Yong Liaw
Senior Programmer



Jessica Fenker
R Programmer



Sean Hawthorne
Research Software Engineer



Jenna Wraith
ALA Collaborator



Rob Clemens
Change & Communications
Manager



Emilia Decker
Support & Training Officer

Challenge No 2: Retention of staff through Covid-19

Our team in 2022/23

Meet the amazing people working to bring EcoCommons to life



Elisa Bayraktarov
Program Manager



Arve Solland
Tech. Lead & Solutions
Architect



Amanda Buyan
Data Analyst



James Li
Web Designer & Developer



Diego Guillen
Senior Software Engineer



Yong Liaw
Senior Programmer



Jessica Fenker
R Programmer



Sean Hawthorne
Research Software Engineer



Jenna Wraith
ALA Collaborator



Rob Clemens
Change & Communications
Manager



Emilia Decker
Support & Training Officer

Challenge No 3

Losing key roles “The Bus Factor”

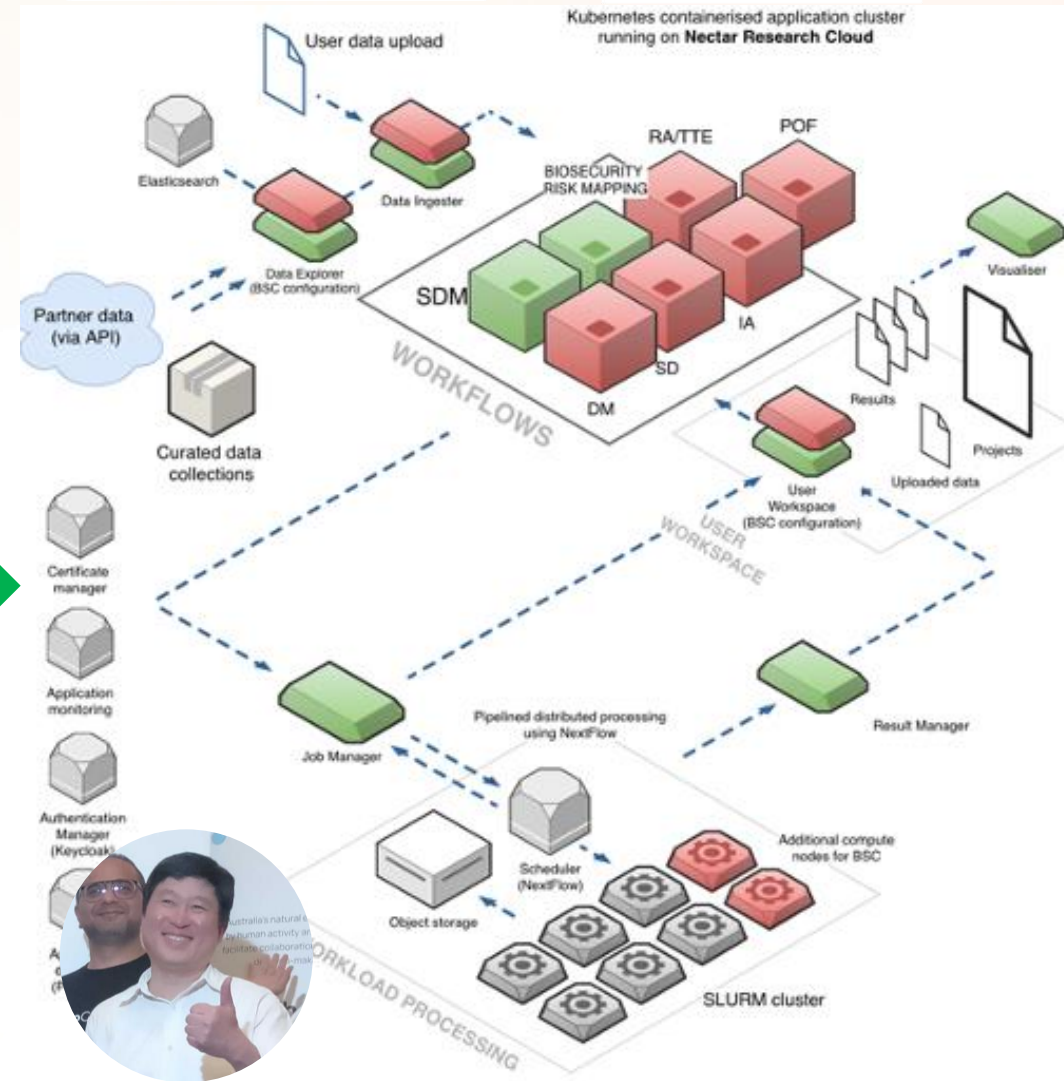
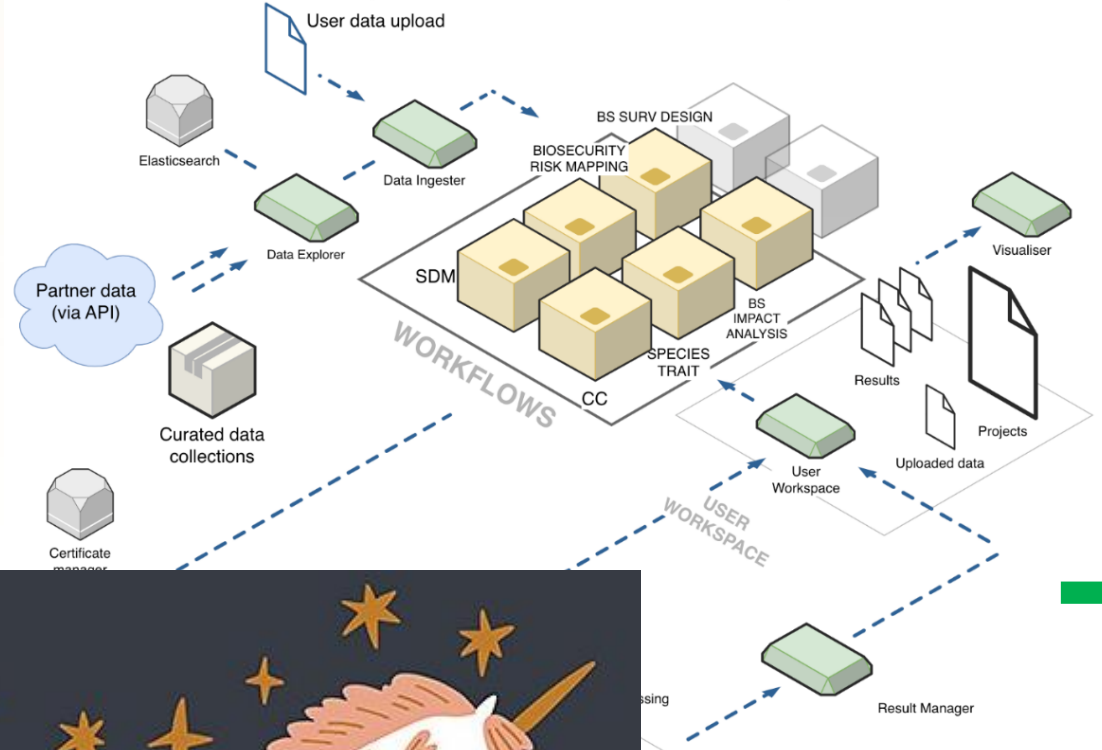


Challenge No 3: Losing key roles - "The Bus Factor"



Arve Solland

Tech. Lead & Solutions Architect



Rob Cosgrove

Biosecurity Commons Tech Lead



Jake Yip

ARDC Core Team



Ping Chen

ARDC Core Team

Challenge No 4: Recruiting talent during post-Covid 19 and keeping them (without continuing contracts or competitive salaries)

Our team in late 2023

Last working day

30 Nov



Elisa Bayraktarov

Program Manager – 1 FTE

22 Dec



Afnan Bashir

Tech Lead & Solutions Architect – 1 FTE

10 Nov



Osama Yahya

Senior Software Developer / Internalisation – 1 FTE

22 Dec



Seema Jadhav

Senior Software Developer / Backend – 1 FTE

30 Sep



Kalani Samarathunga

UI/UX Developer – 1 FTE

22 Dec



Rupert Marquand

Communications and Marketing Manager – 0.5 FTE

22 Dec



Llewyn Randall

R Programmer – 1 FTE (casual)

22 Dec



Sean Hawthorne

Research Software Engineer – 0.3 FTE

22 Dec



Abhimanyu Raj Singh

User Support Officer – 1 FTE

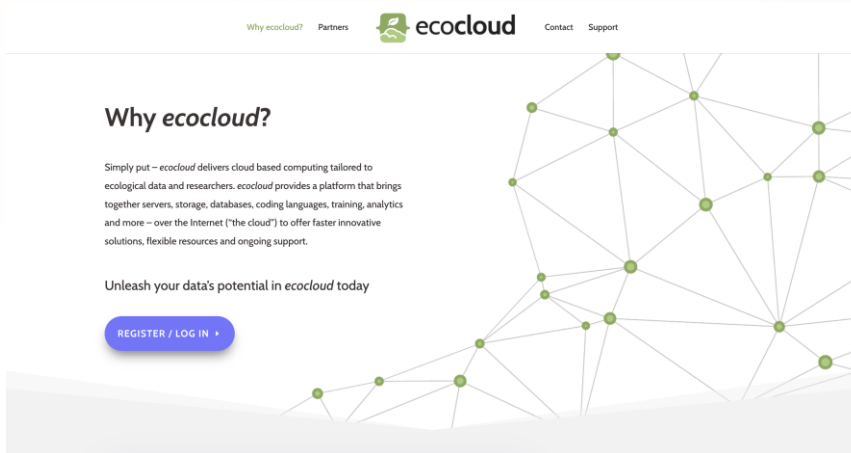


Challenge No 5:

Inheriting technical debt and maintaining legacy platforms



Challenge No 5: Inheriting technical debt and maintaining legacy platforms



Biodiversity and Climate Change Virtual Laboratory (BCCVL)

- Species Distribution Modelling and Climate Change experiments
- Results validation
- Environmental and climate data layers
- Access to occurrence data

ecocloud

- Run code on the cloud using cloud compute

Delays with core product development: ~6 months

Collaborative Species Distribution Modelling Program (CSDM)

- Platform for running Species Distribution Modelling and sharing between Australian governments.
- Default parameters to suit governmental needs



Challenge No 6:

**Critical path for
continuation and
partner co-investment**

Challenge No 6: Critical path for continuation and partner co-investment

- EcoCommons Australia platform will be maintained until 15 Dec 2023
- It still unclear what will happen afterwards
- Governance board urges against the message of "decommission", however, continuation investment and partner buy-in are uncertain and lead to disengagement of team members who are seeking alternative employment

Modelling, Analytics and Decision Support Infrastructure (MADSI)

Community-led analytic and decision-support tools, models and platforms for earth and environmental science research



Painted Dragon, *Ctenophorus pictus*. Image: Ian R McCann - species/8372 / museums victoria.com.au

Who will benefit Earth and environmental science researchers and decision makers



The Challenge

To meet the societal challenges of climate change, saving threatened species, reversing ecosystem deterioration and understanding cumulative impact we need cross-sector digital integration at scale.

This needs connected, enduring environmental digital infrastructures that support research and decision making. Research and data infrastructures need to form a digital ecosystem that enables different domains and sectors to access and combine data and network scientific models, link seamlessly to analysis platforms, and ensure model outputs are FAIR.

Timeframe

August 2023 to December 2025

Current Phase

In progress

ARDC Co-investment

\$3,000,000



1. **Collaborations** – focus on those that can help you achieve your deliverables or add substantial benefits (money, skills, data, etc.)



2. **Retention of staff** - if you can't give them more pay, give them lifestyle and flexibility



3. **Improve “Bus-Factor”** – encourage good documentation and knowledge exchange



4. **Attract talent** by building a great reputation (Diversity, Equity, Inclusion) and use social media and networks to distribute job ads



5. Communicate to your investors/governance boards that **any legacy platforms must be discontinued** so you can focus on new platform only – unless maintenance of legacy is budgeted for



6. **Critical path for continuation** of eResearch platforms... let me know!



Lessons learned





www.ecocommons.org.au

We gratefully acknowledge



Kick off in 2020...the sky was the limit

Any questions?

