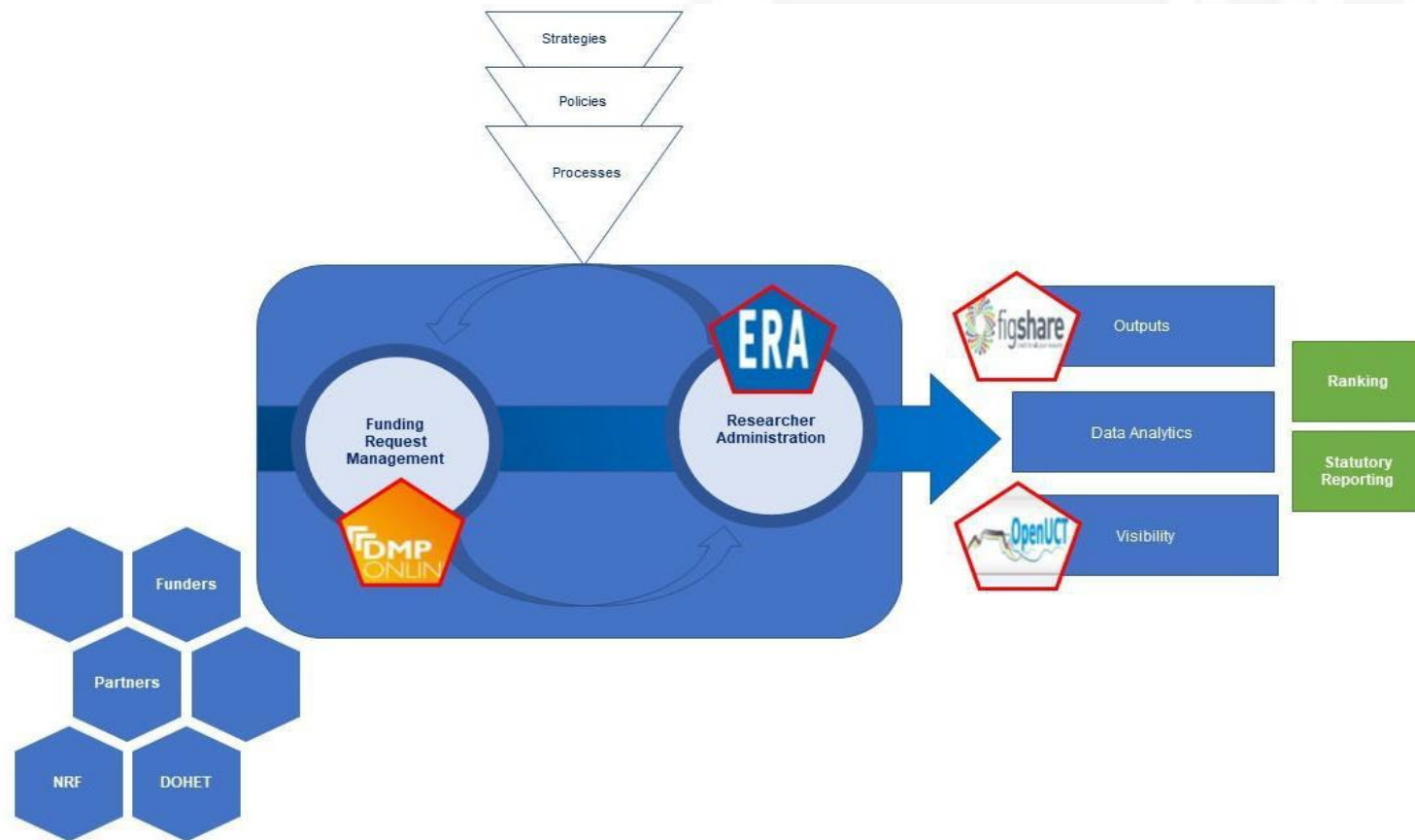
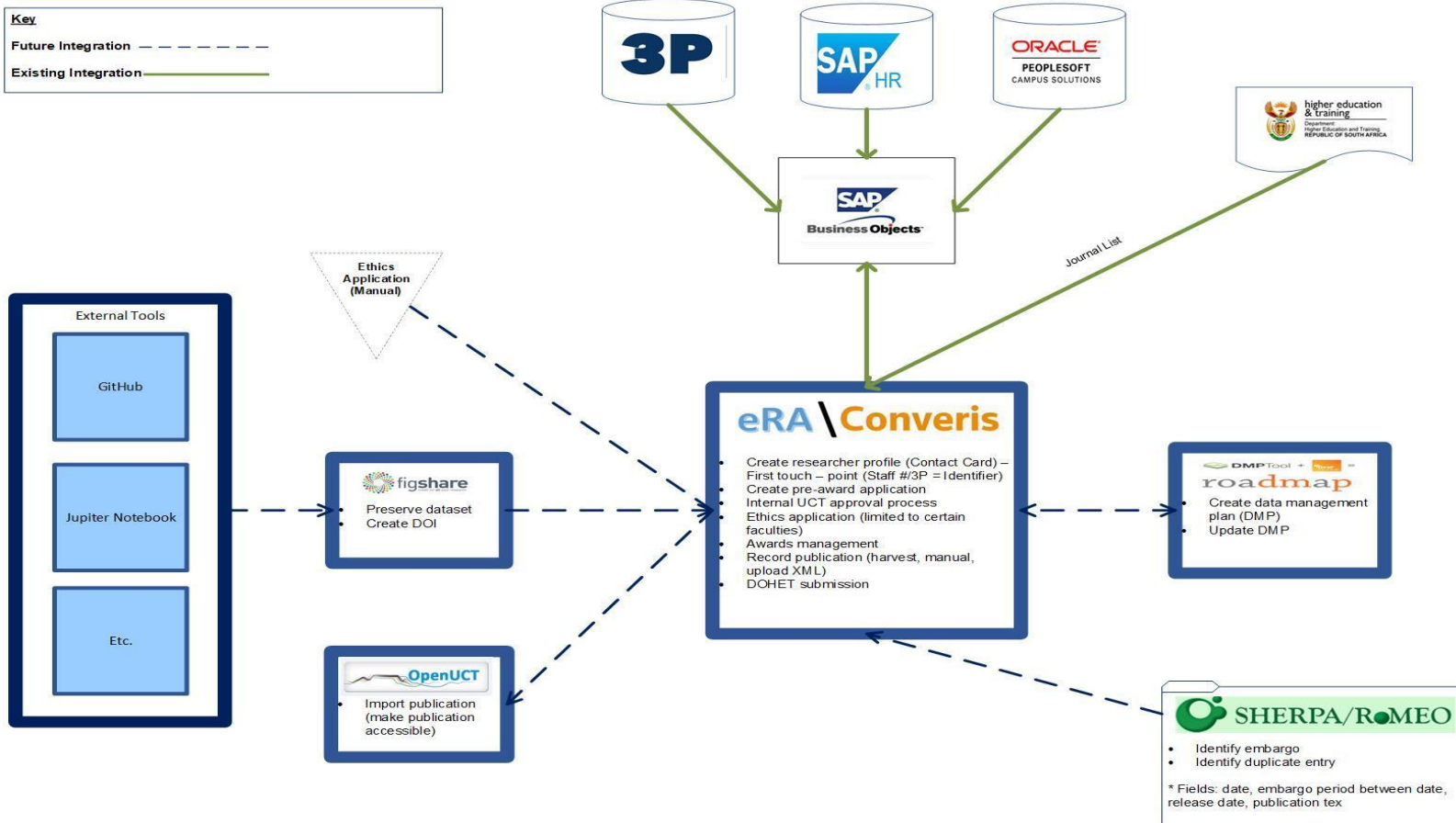


# *University of Cape Town, South Africa Research Data Integration Project*

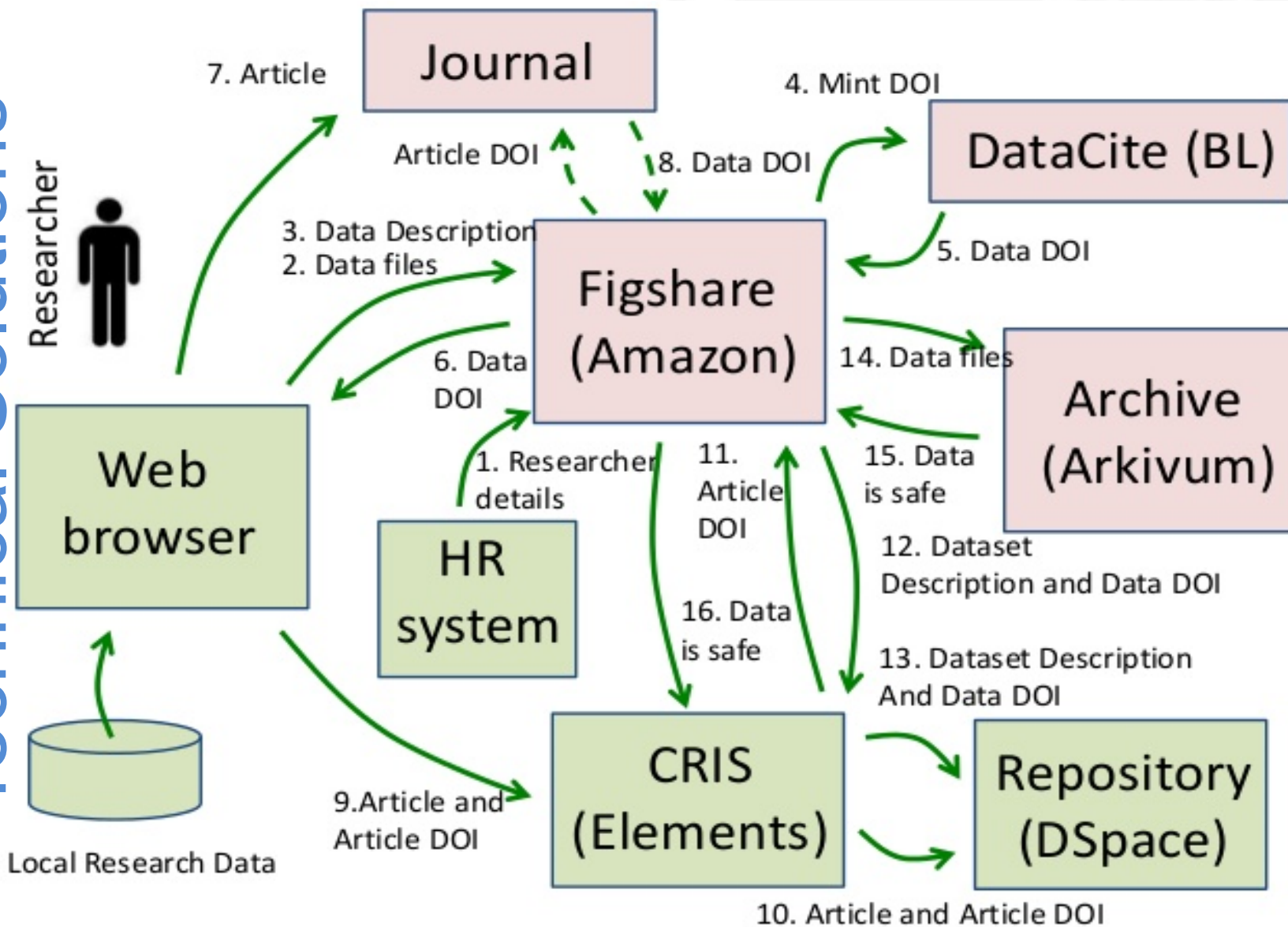
# Project Aims



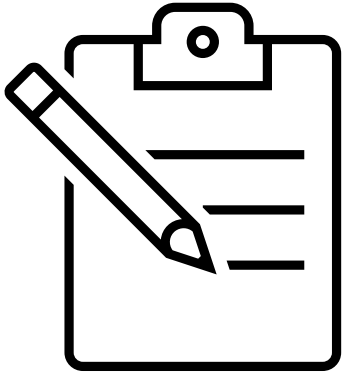
# Project Scope



# Technical Solutions



# Identified Key Challenges



- Research Data Management (RDM) policy implies additional administrative burden
- Duplicate capture across systems
- Fragmented research outputs
- Restricted statutory reporting
- Accountability for DMP commitments
- Monitoring compliance with funder requirements
- Cost to UCT Libraries of mining UCT affiliated publications from the web

## Identified risks



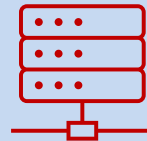
Recommendations for mandatory DMP and mandatory ORCID - scope creep



Difficulty in alignment with eRA project schedule



Vender integration assistance. Converis Africa user group in its infancy.

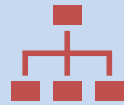


Proliferation of research systems. Burden on capacity at ICTS



System upgrades during project duration

## WG1:



Map business processes across the 4 systems. *Complete*



Investigate and identify unique identifiers in the research workflow. *Complete*



Investigate the authentication mechanisms of the respective systems. *Complete*







Develop an architectural strategy for the identified integration requirements between the systems. *Complete*

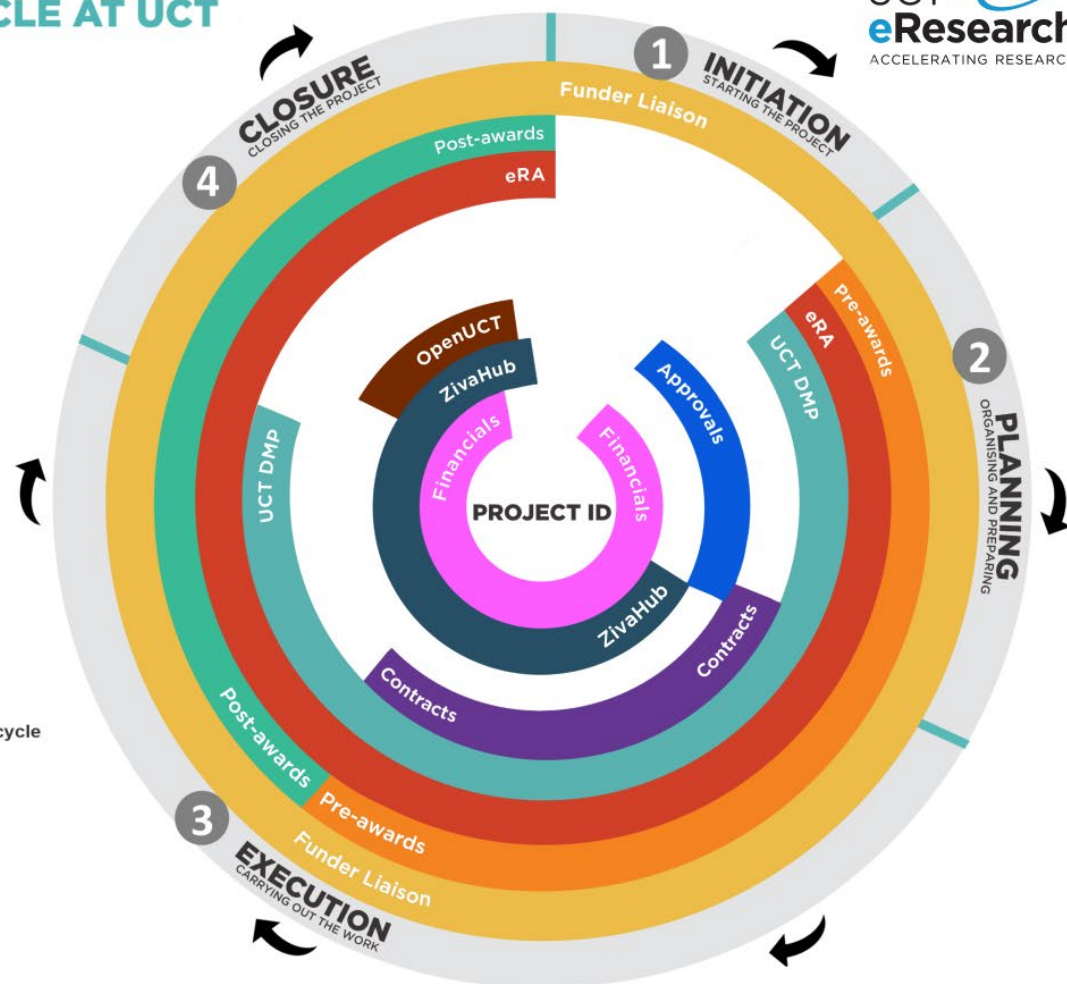
# PROCESSES AND SYSTEMS IN THE RESEARCH PROJECT LIFECYCLE AT UCT

## PROCESSES

- Funder Liaison** (Yellow bar) Develop proposals, submit applications and reports, negotiate a contract, and share data management plan and research data
- Approvals** (Blue bar) Obtain UCT internal approval to submit funding applications
- Pre-awards** (Orange bar) Project and other funding applications
- Contracts** (Purple bar) Manage contracts
- Post-awards** (Green bar) Track project award financial activities

## SYSTEMS

-  **eRA System** (Red bar) One-stop shop to manage and track the administrative workflow within a project lifecycle and beyond
-  **UCT DMP** (Teal bar) Create, update and (privately) share Data Management Plan (DMP)
-  **OpenUCT** (Brown bar) Deposit research to share with the global community
-  **ZivaHub** (Dark Blue bar) Upload, update, (privately) share and publish research data



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## WG2: Enable systems integration

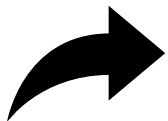
### Scope

- Enable integration between systems, based on the Scholix Framework, for a data literature interlinking service
- Develop an automated process to populate OpenUCT to reduce duplication and activate SHERPA/ROMEO configuration in eRA
- Development on integration between OpenUCT, UCT DMP and ZivaHub with CRIS systems
- Implement the authentication mechanisms of the respective systems

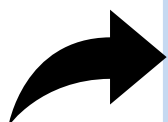
## WG2:



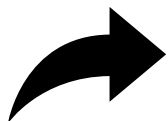
Integration, based on Scholix framework, in place on OpenUCT and ZivaHub platforms. *Complete.*



OpenAIRE Brokering service to populate OpenUCT and ZivaHub in process.



Integration with CRIS systems in development phase on OpenAIRE.



Integration between OpenUCT and eRA, as well as, UCT DMP and eRA currently in the test environments. Once this is completed integration with ZivaHub [Figshare for institutions] will commence.



Single SignOn enabled on UCT DMP, ZivaHub and OpenUCT. Complete

## WG3:



DMP upgrade to new machine-actionable DMP Roadmap codebase. *Complete*



DMP templates refined according to funder requirements. RC&I have taken responsibility for tracking funder mandates.



SSO integration on UCT DMP. *Complete*



User engagement conducted at RDM Governance committee on DMP integration with eRA. *Complete.*



DMP integration with eRA deferred to the scheduled development of the eRA Ethics module in 2021.

## WG4:



Create guidelines, provide information to research support staff of the standardized UCT systems workflow. *Complete*



Develop tools to assist the researcher in navigating the standardized systems workflow, incl. videos / workshops e.g. promoting the mandatory use of ORCID *Complete*



Channel researcher feedback to development teams  
Note : communication must be continuous/regular.  
*Complete*

For all project outcomes see : <http://www.researchsupport.uct.ac.za/research-data/rdip>

# Key Challenges to research systems integration

1. Need to report to Department of Higher Education and Training for South African Post Secondary Education Information System (SAPSE) subsidy funding = automated improvement of data quality for pub count
2. Infrastructure providers invited to eResearch Africa 2019 seemed slow to respond to need for interoperability. More recent initiatives indicate growing awareness e.g [ Make the world a PID'er place; EOSC Task Force on PID Policy and Implementation; [OpenOrgs: the OpenAIRE tool for bridging registries of research organizations.](#)]
3. Research Engagement and Adoption: WG 4- ongoing effort to find the researcher perspective, e.g. slow rate of adoption of institutional ORCID
4. Technical issues: WG2 update ; including SSO authentication across all 4 systems
5. eResearch function: co-ordination across support services

For all project outcomes see : <http://www.researchsupport.uct.ac.za/research-data/rdip>