

Working in partnership to build a Research Information Management System at the University of Westminster

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Today's session

About the University of Westminster and the business processes

- Who is involved in supporting this software and the research lifecycle

The software (the Virtual Research Environment or VRE)

- The original use case, engagement, an agile approach, the long road
- Haplo Architecture, Workflows, Forms, Reporting

The modules

- Graduate Education Manager
- Research Governance and Ethics
- Researcher Profiles
- Implementing ORCID
- WestminsterResearch: the single (open source) repository for all research outputs
- REF Admin
- Funding

Benefits and challenges

Lessons learned

Next steps – Data management planning, Reporting

About the University of Westminster

4 campuses centrally located in and around the London area

Over 19,000 students from 169 countries

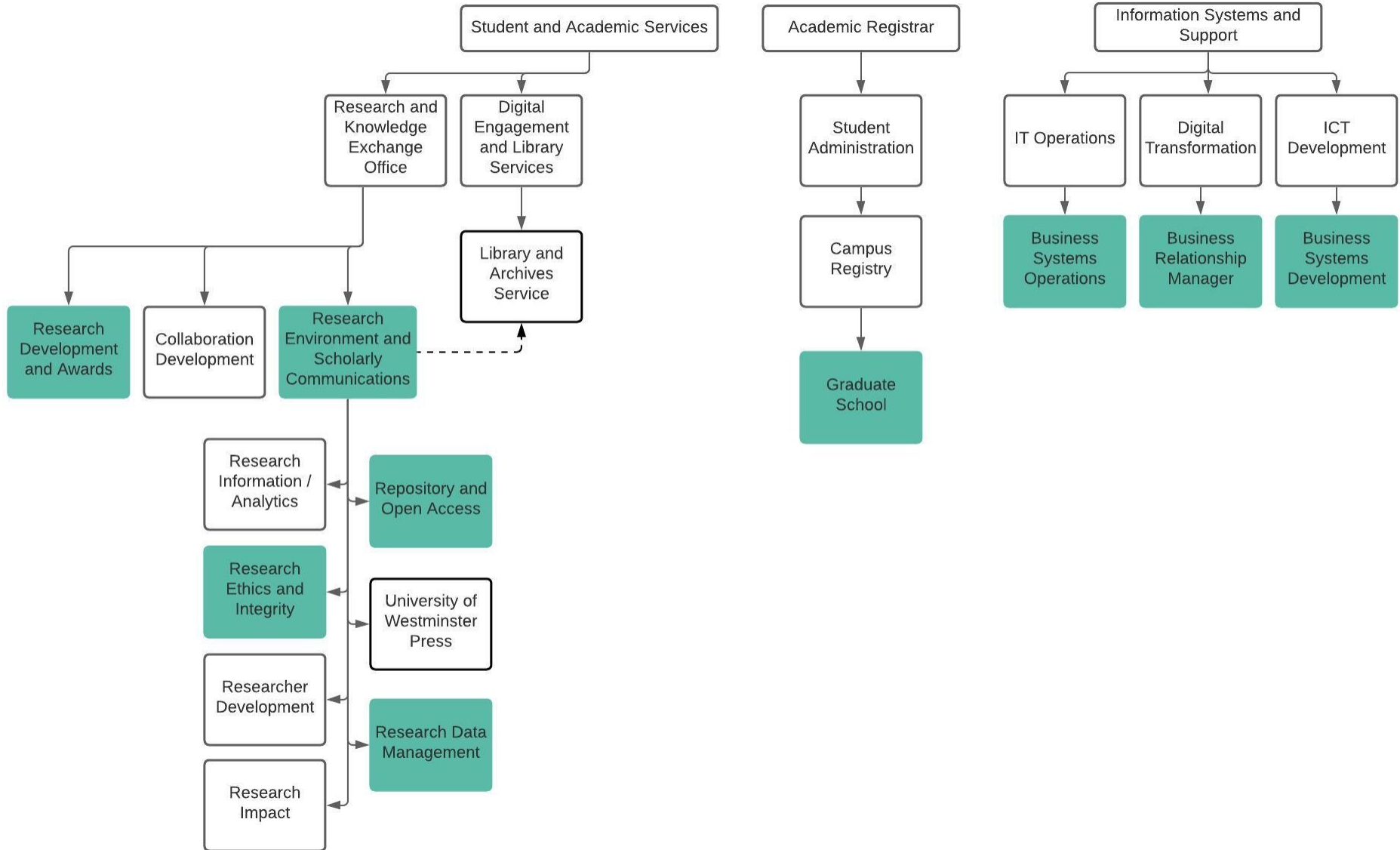
866 academic staff (with just over half engaged in research) and 800 support staff



World leading research in Art and Design and Media and Communications; Internationally excellent research in English, Architecture and the Built Environment and Allied Health; Excellence in Psychology and Neuroscience, Politics, Area Studies and Law (Research Excellence Framework, 2014)

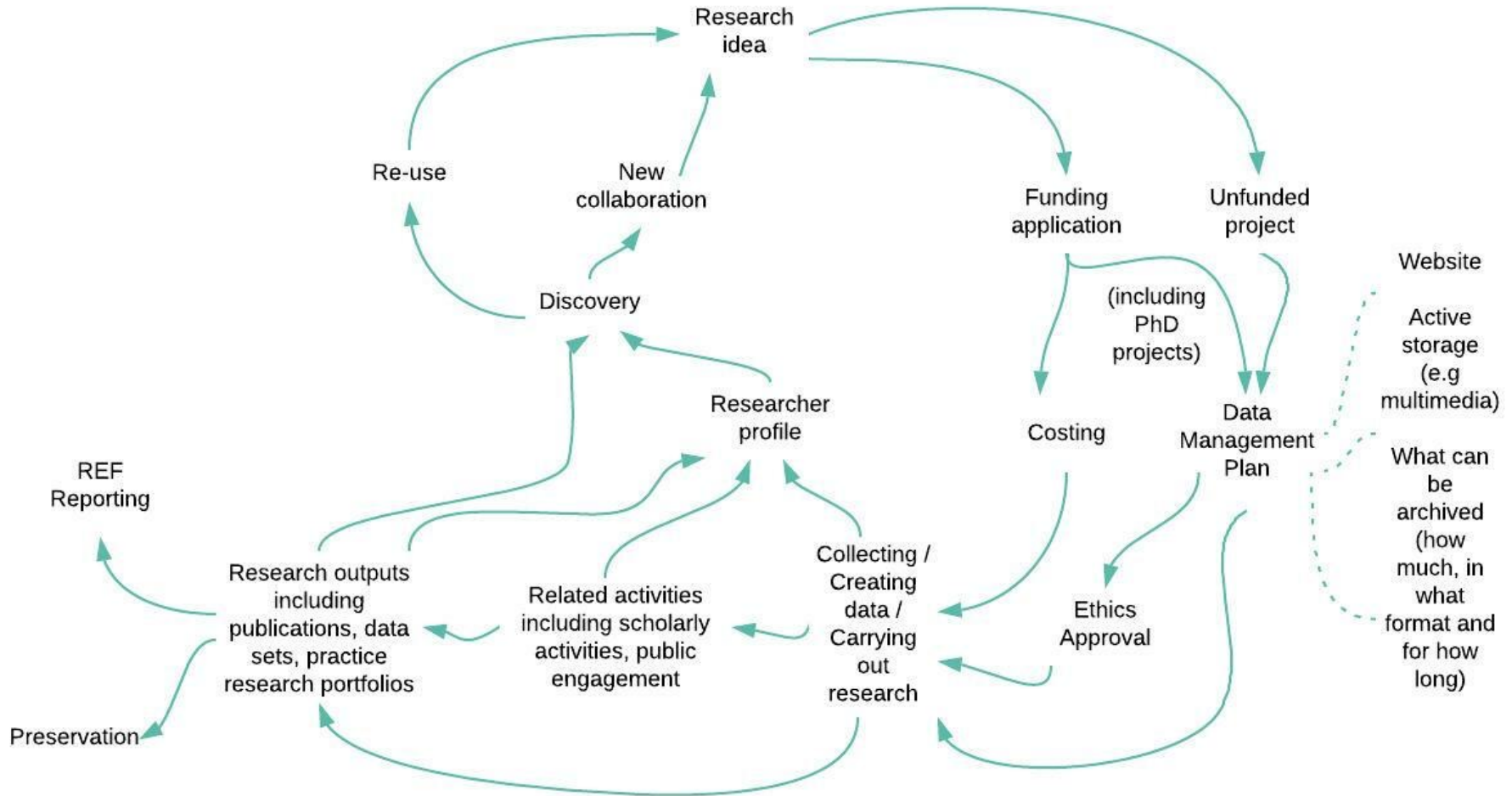
University of Westminster

Selective structure chart



Research lifecycle

What (business) processes is the software supporting?



The original use case for the software (2012)

Review business processes and support systems relating to research

Initial focus on Research Data Management (RDM) and its integration into University systems

Interviews with researchers and University professional support staff to understand needs and priorities

Outcomes

- a **single portal** - the need to **join up processes** and take the solution to the researcher –**streamlined administrative processes, increased visibility** of research work, **increased collaboration**
- A technical platform to enable application to be developed **quickly and flexibly**, to **interface with other systems, future-proofing** to enable the adding of extra research support functionality and **sustainability**

Engagement

Researchers and research support staff

- Built in from the beginning – got buy-in from the community early on and we have brought them with us
- Almost completely researcher-led to begin with – have moved to a business-led approach with researcher representation
- Understanding of pain-points and priorities
- Collaborative approach – with community and supplier



Repository development team 2017-2018

An agile approach

From small project to core university system

- Rapid development (by Haplo) of software but built up the product slowly and incrementally
- Platform hosted by Haplo
- Under the radar...to IT project management...to business ownership working in collaboration with IT
- Current working group led by Student and Academic Services as the Business Owner
- Includes representatives from Registry, Information Systems & Support and Researchers

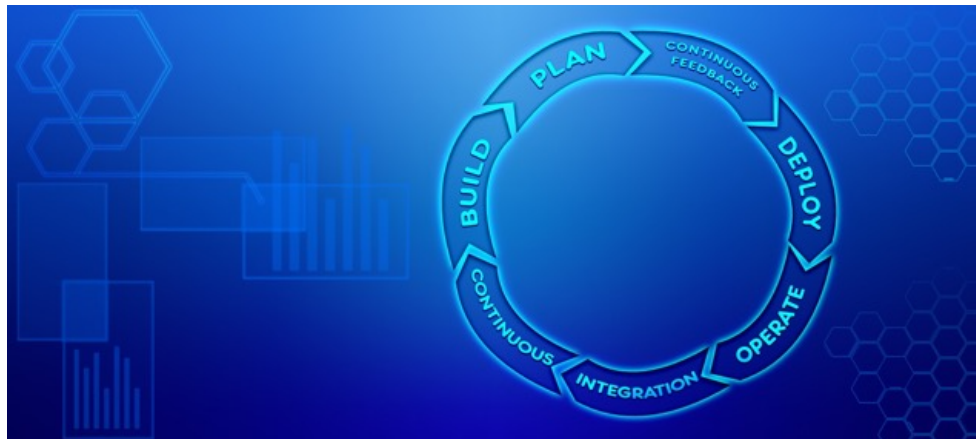
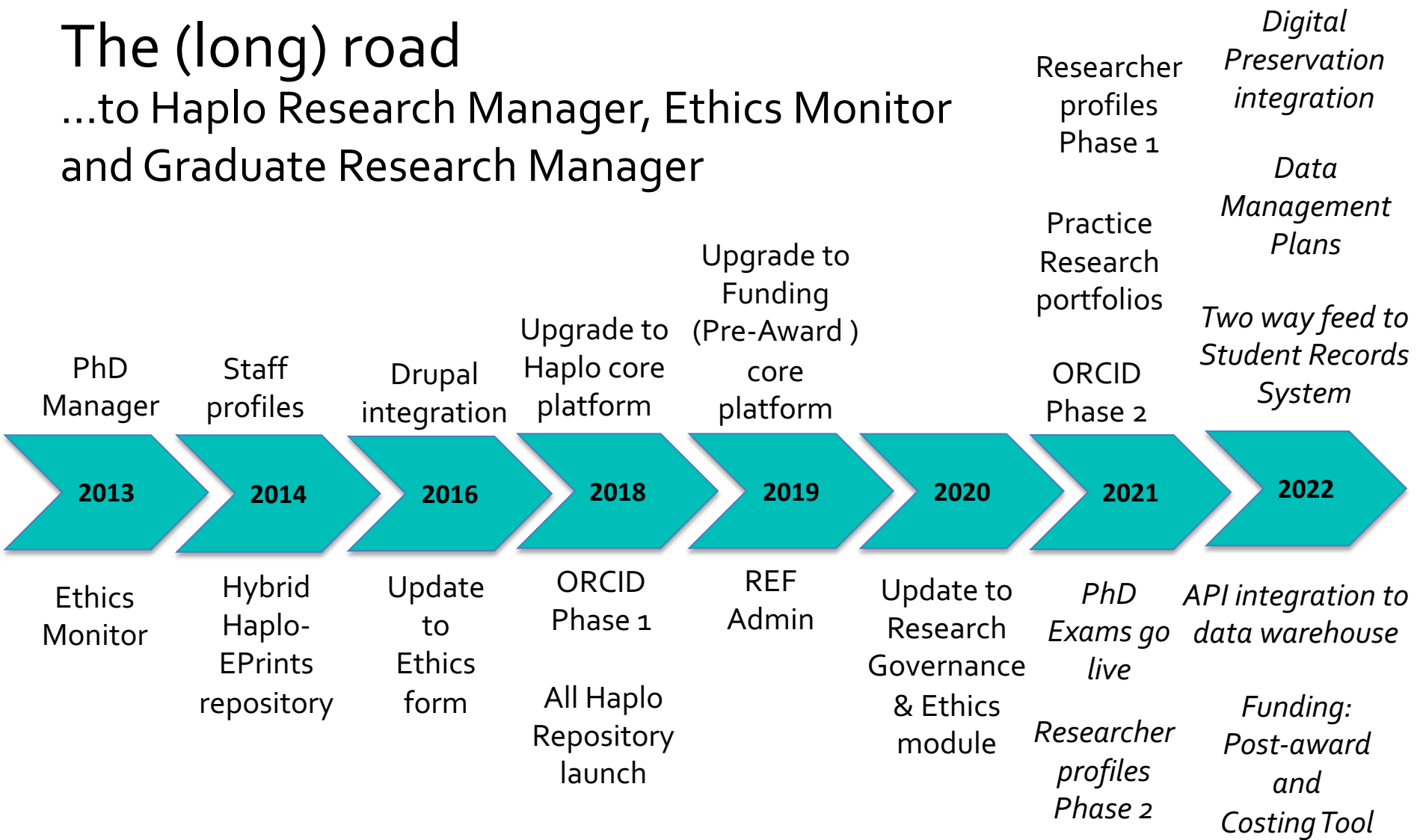


Image by [Dirk Wouters](#) from [Pixabay](#)

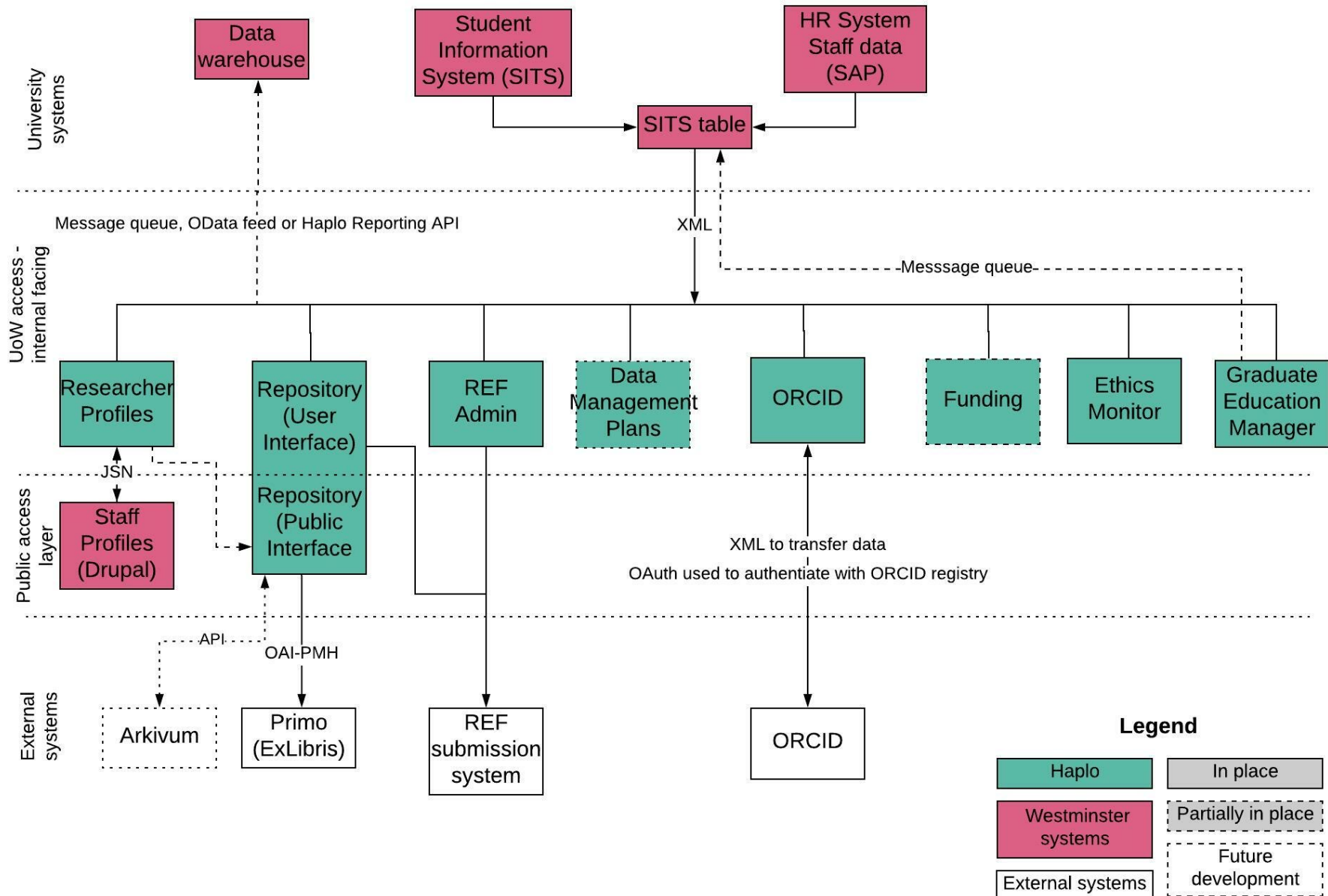
The (long) road

...to Haplo Research Manager, Ethics Monitor and Graduate Research Manager



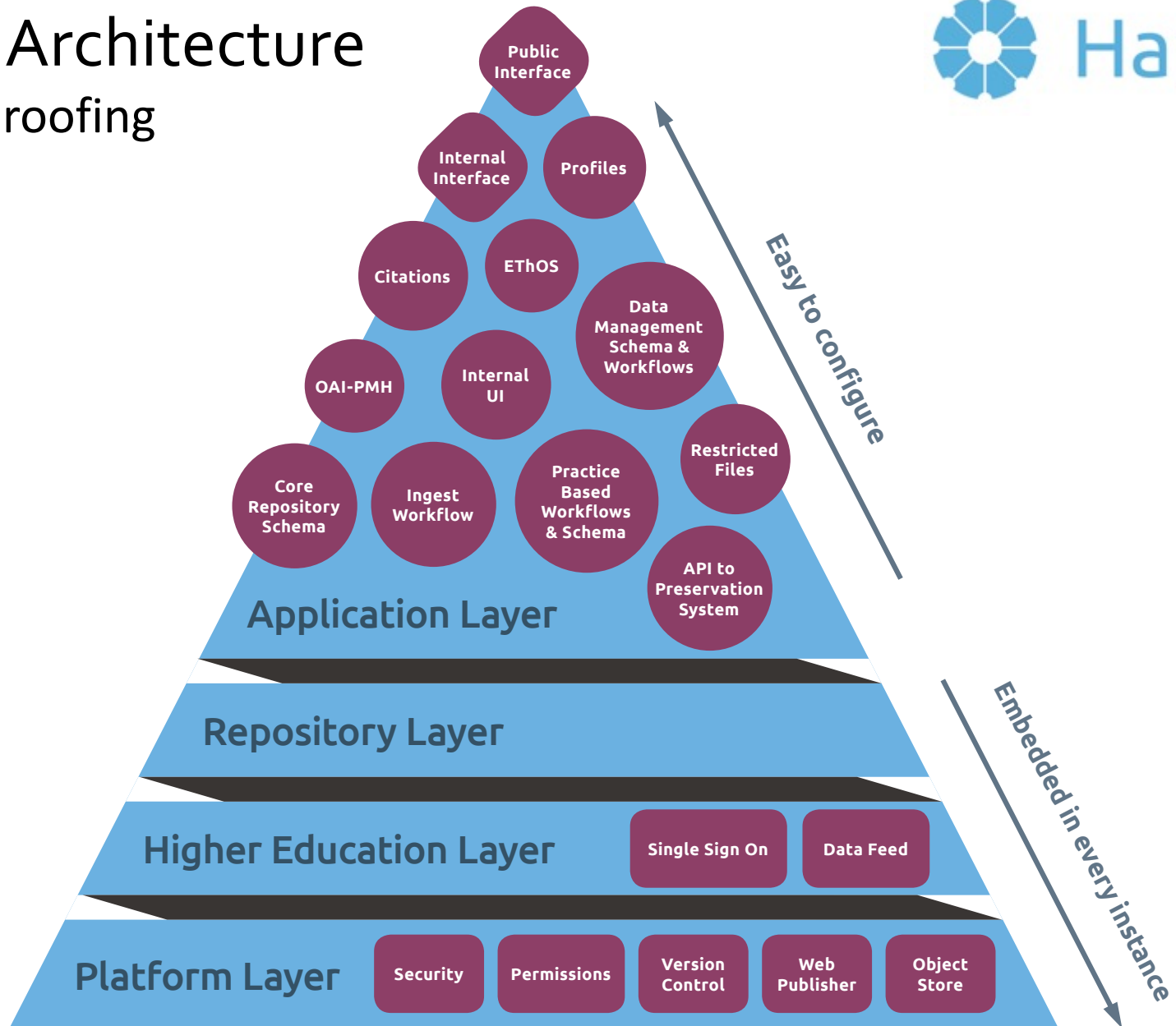
“A current research information system (CRIS) is a database or other information system to store, manage and exchange contextual metadata for the research activity funded by a research funder or conducted at a research-performing organisation”

The Virtual Research Environment (VRE)




Haplo Architecture


Future proofing



Evans, J. & Renner, T. (2019). A single open source repository for every use case (Poster). *International Digital Curation Conference*, Melbourne, 4-6 February 2019.

Workflows



Quick search Search Browse Recent Tasks **1** Rivi Jackson  Help

Supervision meeting - 06 Mar 2018 - Ms Ellie Coleman

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Faculty of Wellbeing, Education and Language Studies
The Open University Business and Law Schools

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Upcoming meetings

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Online resources

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Supervision Meeting

Title	Supervision meeting - 06 Mar 2018 - Ms Ellie Coleman
Date	06 Mar 2018
Project	Doctoral Research Project
Researcher	Ms Ellie Coleman
Participant	Ms Ellie Coleman Prof Rivi Jackson Dr Rikki Abbott
Academic year	2017 - 2018

Meeting

Participants
Ms Ellie Coleman
Prof Rivi Jackson
Dr Rikki Abbott

Date, time and location

Meeting date

STATUS
Waiting for Prof Rivi Jackson to review the notes

CURRENTLY WITH
Rivi Jackson

- Edit meeting notes
- Confirm notes
- Ask for revisions


Supervision notes

Download printable PDF...

CHECKLIST

- Date scheduled
- Researcher's notes
- Meeting has taken place
- Action points

Forms



Quick search Search Browse Recent Tasks **1** Abbey Abbott ⚙ Help

[← Back](#)

Edit Examination report: Post-examination: Examination - Ms Ellie Coleman

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Recommendation of the panel Report Report to candidate

The examination panel recommends: *

- The candidate is awarded the degree of PhD, with no typographical errors, corrections or amendments.
- The candidate is awarded the degree of PhD, after satisfactory completion of corrections and minor modifications as specified in this report.
- The candidate is awarded the degree of PhD, after satisfactory completion of substantial amendments as specified in this report. All the examiners will check the amendments made.
- The candidate should be permitted to re-submit the thesis for re-examination and re- viva for the degree of PhD, afte major revision as specified in this report.


The examiners responsible for checking revisions will be: *

- Dr Hyatt Ahmed
- Dr Karlyn Glover

Deadline for revised submission

Recommendation of the panel Report Report to candidate

Reporting

 **Haplo**

Search **Browse** **Recent** **Add** **SUPPORT** **Help**

Annual Progress Review overview

Home

University of Example

Humanities

Media

Science and Technology

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179
PGRs who have submitted an APR

10
PGRs who have not submitted an APR

Export

◀ **2017 - 2018** ▶

-- Faculty -- -- Department --

Doctoral Researcher	Faculty : Department	Supervisor	Submitted	Meeting date	Status	Concerns raised
Abbott, Corrie	Humanities : History	Prof Barb Gibson	28 Mar 2018	21 Mar 2018	Review	
Abbott, Mor...	Science and Techn...	Dr Helsa Harper	10 Feb 2018	22 Feb 2018	Interview	✓
Abbott, Nick	Science and Techn...	Prof Zsa Zsa Ra...	09 Jan 2018		Submitted	✓
Adams, Che...	Media : Art and Des...	Dr Abbott Shah	24 Oct 2017		Review	
Adams, Cla...	Science and Techn...	Prof Vallie Herbert	23 Oct 2017		Review	✓
Ali, Kit	Science and Techn...	Dr Vaughn Willis	29 Jan 2018	02 Feb 2018	Review	
Allen, Bealle	Science and Techn...	Prof Alberta Joyce	02 Oct 2017		Review	
Anderson, A...	Humanities : History	Dr Grace Poole	24 Nov 2017	08 Dec 2017	Interview	
Anderson, O...	Science and Techn...	Prof Ag Pearson	02 Nov 2017	08 Nov 2017	Review	
Andrews, C...	Humanities : Law	Prof Romy Chan...	27 Dec 2017		Submitted	
Armstrong, ...	Media : Music	Dr Jillene Peacock	20 Jul 2017	25 Jul 2017	Interview	
Atkins, Gerard	Science and Techn...	Dr Bambi Gibbons	22 Nov 2017		Review	

Modules

Areas of the business

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University of Westminster
Design, Creative and Digital Industries
Liberal Arts and Sciences
Westminster Business School

Research groups and clusters

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REF Units of Assessment
Past events


Supporting researchers


● ● ●


 **Research Funding**


 **Research governance & ethics**

 **Repository of Research Outputs**

 **Graduate School**

 **REF**

 **Researcher profiles**

 **Virtual Research Environment**





My record

Add output
My Research Outputs
My projects

Find a researcher

Find research


Recent additions

-  The changing nature of lab...
-  Landscape as Weapon: Cu...
-  Mr Gareth McKee
-  Mr Paul Jemwa
-  Mr Roshan Gunathilake

[More](#)


Sign up for ORCID now!

ORCID IDs provide a unique international identifier to each individual researcher to enable greater accuracy and visibility of their research output.

 [Create or Connect your ORCID iD](#)

After you click 'Create or Connect your ORCID ID' you'll be taken to the ORCID site, where you can create a new ORCID, or log in to tell us about your existing ORCID. Afterwards, you'll be sent back here.

Want to find out more about ORCID IDs? [Read more here.](#)



Graduate Education Manager

(formerly known as PhD Manager)

Doctoral researchers and supervisors manage the doctoral researcher record

- Management of administrative processes associated with the doctoral researcher lifecycle
- Manage doctoral researcher's personal development and engagement with the Doctoral Researcher Development Programme
- Went from many paper-based processes and workflow
 - Increased transparency
 - Streamlining of process made it easier for people to engage
- More effective reporting dashboards

Research Governance and Ethics

- Moving away from paper-based processes and introduction of forms underpinned by conditional logic to guide applicants through the process
- Automated workflows so that the right people see appropriate applications at the right time
- Dynamic questions with in-built logic specific to the institution
- Forms based on specific external requirements (e.g. NHS)
- Oversight at University level as to where the application is within the workflow
- Reporting – dashboards rather than having to manually collate data
- Features include an audit tool, adverse events reporting and the identification of governance issues

Researcher profiles

Or staff profiles?

- Increased visibility of research activity carried out at the University
- Consistent way of displaying information
- Gave researchers and doctoral researchers control over this data
- Feed from Haplo to Drupal
- Tension between 'staff' and 'researcher' profile

UNIVERSITY OF WESTMINSTER

OUR UNIVERSITY OUR PEOPLE VISIT US CONTACT US ALUMNI AND SUPPORTERS

SEARCH

Dr Simon Flacks
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Tuesdays 2-4pm

Automatic - HR/other systems - You update them - VRE Web teams add it

ABOUT ME TEACHING RESEARCH PUBLICATIONS

CONNECT WITH ME WestminsterResearch

I'M PART OF

- Centre for Law, Society and Popular Culture
- Centre on the Legal Profession
- Westminster Law and Theory Lab

ABOUT ME

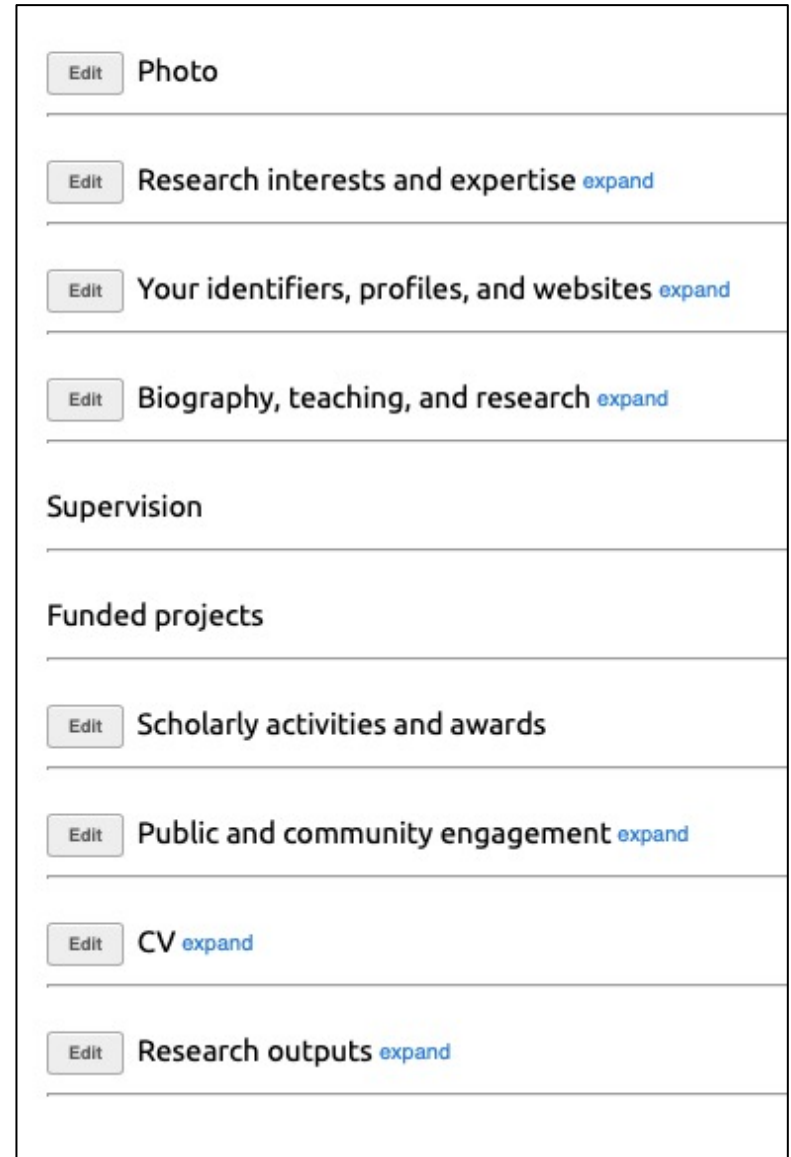
I joined Westminster Law School in 2014, having spent two years as a lecturer at the University of Reading. Prior to this, I completed a PhD at the University of Vienna, Austria, which involved social research into adolescent drug treatment in England, and analysis of UK drug law and policy. I graduated in 2013 and continue to undertake research in the areas of youth justice, criminology, drug use/policy, human rights and discrimination. Before entering academia, I worked as a newspaper journalist, mental health support worker and in the voluntary sector as a child rights officer.

Auto-generated on every staff profile. Social media links and personal websites also appear here if you've added them in the VRE

Enhanced user interface

WestminsterResearch profiles

- Phase 1: enhancement of user interface
- Researcher and doctoral researcher profiles will display within WestminsterResearch (repository)
- Colleague profiles will sit within Drupal on University website
- Phase 2 underway



Implementing ORCID

Capture (the ORCID iD) and propagate (to other systems) use case

ORCID: a persistent digital identifier (an **ORCID** iD) that a researcher owns and controls, that distinguishes them from every other researcher

Who? Researchers, Doctoral researchers, professional services colleagues engaging in research

Where? SAP, EPrints, Haplo?

Capturing it within Haplo associates that ORCID iD with the researchers VRE profile

Import of data from ORCID to VRE and data push from Haplo to ORCID

The screenshot displays a website interface with a purple header and navigation menu. The main content area features several service tiles: Research Funding, Research governance & ethics, Repository, Graduate School, Researcher profiles, and Virtual Research Environment. A prominent white box contains a sign-up prompt for ORCID, explaining its benefits and providing a link to sign up. On the right side, there is a 'My record' section with links to research outputs, projects, and ethics applications, a search bar for researchers, and a 'Recent additions' list with various document icons.

Westminster Research

Moving from a hybrid Haplo-EPrints repository to an 'All Haplo' repository

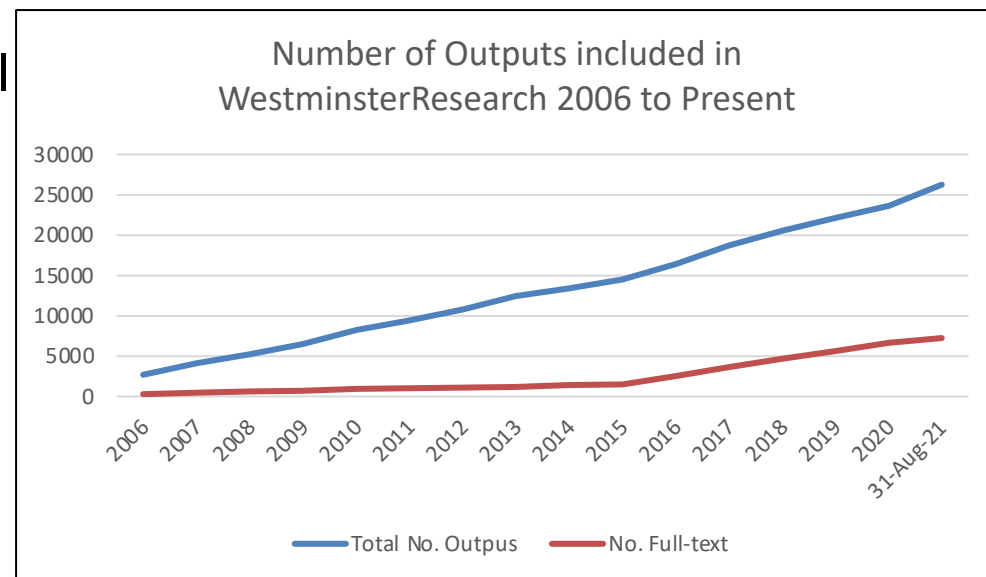
Hybrid repository solution (Haplo user interface – EPrints public repository) went live in November 2014

- Benefits included move to self-deposit (away from mediated deposit), better reporting via OA compliance dashboard

Why change?

- Flexibility of the Haplo data model
- Hybrid model resourcing focused on maintaining this rather than enhancing functionality
- University going through cost saving exercise at the time

Perceived risks of moving vs not moving



Data source: WestminsterResearch

Building a repository

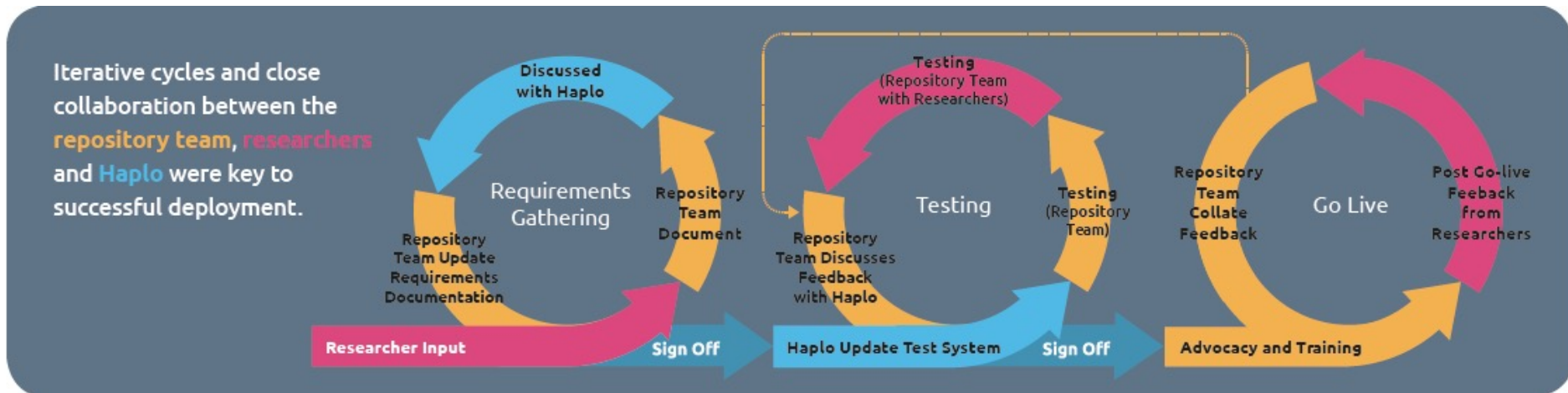
Requirements gathering, user testing, post-go live feedback

Aim: to build a standards-based 'all outputs' repository useful for the entire repository community

Repository and Open Access Advisor has over 10 years repositories experience

Focus on our practice-based arts research community

Input from the two other universities committed to implementing a Haplo repository



Repository

Data repository use case

- Existing hybrid solution unable to support both 'publications' and 'research data'
- Haplo repository can support multiple schemas within the same application so datasets and outputs can be stored in the same system
- Meet external funder data requirements
- Unlike 'research publications' – datasets need different levels of access – with a managed access workflow – and secure storage
- More sophisticated role-based access control mechanisms, per-file and per-record level permissions based on those user roles
- Planning to pilot digital preservation integration with Arkivum

Public interface

Pre-migration

Welcome to WestminsterResearch

WestminsterResearch is the University of Westminster's online repository, containing the research output of the University's academic community.

Thousands of publications are currently listed in the archive, many of which are accompanied by a full-text e-print and hundreds more provide a link to the full-text on the publisher's website.

WestminsterResearch is available through open-access.

Further information and help pages are available at:

<http://www.westminster.ac.uk/westminsterresearch>

Please note: This is not a complete listing of research publications of the University of Westminster.

If you would like to know more about WestminsterResearch or are interested in submitting papers, please check the help pages link above or contact:

repository@westminster.ac.uk

 [Atom](#)  [RSS 1.0](#)  [RSS 2.0](#)

[Latest Additions](#)

View items added to the repository in the past week.

[Search Repository](#)

Search the repository using a full range of fields. Use the search field at the top of the page for a quick search.

[Browse Repository](#)

Browse the items in the repository by subject.

Public interface

Post-migration



The online repository of research outputs from the University of Westminster's academic community.

WestminsterResearch makes information about thousands of publications (many accompanied by the full text or a link to the full text on the publishers website) available through open access.

If you would like to know more about WestminsterResearch or are interested in submitting research outputs, please see: [Open Access: WestminsterResearch](#) or contact repository@westminster.ac.uk.

This repository supports OAI 2.0 with a base URL of
<https://westminsterresearch.westminster.ac.uk/oai2>

[Repository Policies](#) [Browse by year](#)

Latest additions

[The Changing Geopolitics of Global Communication](#)

Thussu, D.K. 2021. *The Changing Geopolitics of Global Communication*. London Routledge.

[Architecture and its Imprint: Building, Concepts, Publication](#)

Peckham, A. 2021. *Architecture and its Imprint: Building, Concepts, Publication*. London Routledge.

[Human Security and International Law: the role of the United Nations](#)

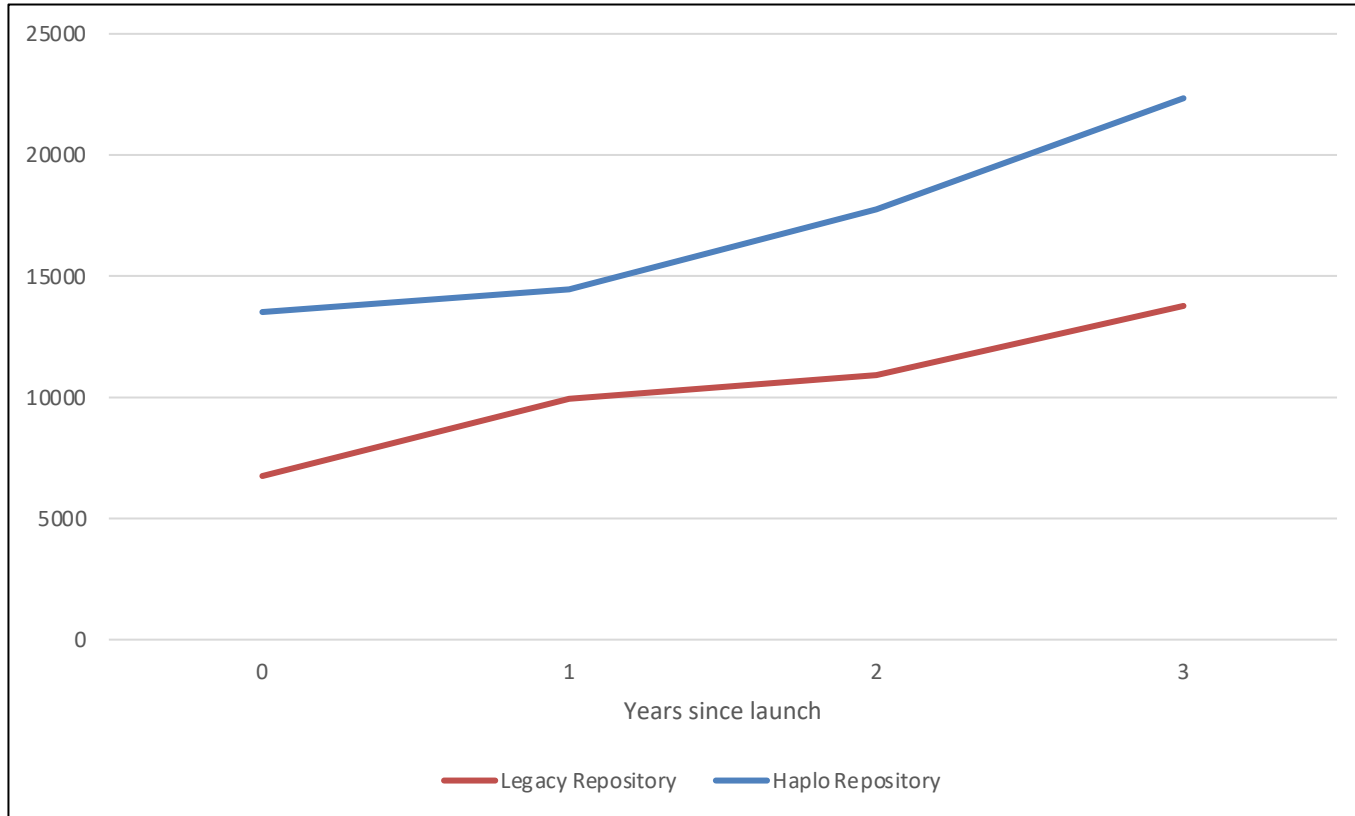
McClean, E. 2021. *Human Security and International Law: the role of the United Nations*. London Routledge.

[Workers' Photography in the East End](#)

Stevens, S. 2020. *Workers' Photography in the East End*.

Repository: Average monthly downloads

Before and after migration



Data source: IRUS-UK

Repository: Practice-based arts research

Portfolios and non-text outputs: a case study

Brings together all of the benefits of the software

- One conversation – portfolios of outputs and their associated documentation
- Flexible metadata model enabled us to not only listen to but deliver on requests for templates that reflect the vocabulary these
- REF template
- Connected to REF Admin workflows
- Closed deposit option has helped with engagement
- Collaboration with Haplo

Mykaell Riley
Bass Culture
DOI: <https://doi.org/10.34737/qqvz>

Key facts | Project framework: context, research questions, summary of research insights | **Project narrative** | Research insights

Further dissemination and recognition | Supplementary material | Metadata record

Project narrative

The project was a response to the lack of recognition of the Jamaican contribution to the story of British popular music since the 1960s within the UK cultural establishment and academia – and the issues of identity, heritage and sense of belonging that have resulted within BME communities.

The approach I adopted, working closely with other members of the BBC team, including Professor Les Back, Jacqueline Springler, Dr Caspar Melville, Janet Browne and Dr Chris Christodoulou, allowed that our key strategy to share knowledge and integrate the community with the academic research was realised through a series of key public events, meetings and seminars. Each member of the team developed their own inquiries, while I managed and coordinated the group, balancing our use of academic methodologies with the need to ensure public and community engagement.

In seeking to create a narrative through research outputs – in the form of an exhibition, a documentary film and an archive resource – as a first step to redressing the balance, I had plenty of ‘raw material’ to draw on: namely, the musical talent embedded in three generations of Britains of African-Caribbean origin. The challenge was to locate the musicians, recording artists, singers, DJs and record producers I wanted and involve them in the same and objectives of the research leading to the film and exhibition.

In telling their story, however, I had to fight their fears of cultural appropriation, while challenging the continued erasure of their contributions to British popular music history. My position as an established artist – I’d been with the reggae band Steel Pulse, then a successful record producer working with Björk, Soul II Soul, Jemima Rooper and others – helped me access hard-to-reach musicians, industry experts and community-based content spanning six decades.

Initiatives such as supporting participants to write their own stories, transcribing interviews and sharing the technology used to capture their content paid dividends – producing more than 200 images, 72 1-40-minute filmed interviews and a line-up of celebrity guests willing to participate in events related to the Amapá 75 exhibition. It also paved the way for my inclusion of the [Drive Home](#) film.

My standing as a musician and record producer gave me access to artists, involving them in the project. However, building an evidence for the exhibition required methodological innovation. Each artist has a potential audience, I figured, if only their family, and I used this approach to widen the network. Essentially, I applied techniques of participation I had learned from marketing and observed them as a research method to secure their participation.

REF Admin

Continuous improvement

- Started with process mapping
- Change in approach from top down to more management at local Unit of Assessment (UoW) level
- Very much 'REF outputs administrative data' a CRIS function – re-using repository output records
- Seen a broader range of users interacting with the software
- Haplo's plug-in based architecture keeps the module flexible for other institutions approaches
- REF-specific roles – The REF Manager role can see REF-related data for all UoAs – each UoA Lead can only see data for the people in their Unit
- Able to generate useful reports / check dashboards at a glance

Funding

London South Bank University

- Enables academics a place to input their ideas easily and directly (reducing data input for support staff and increasing control for academics)
- Simple interface; web based so can access on any device
- Automated approval workflows make it easy and auditable
- Central management of all key documents with clear version control
- They are now able to capture more data giving them better insight
- February 2020 implemented the Costing tool for fully client funded projects
- They are about to go live using the Costing tool for 90% of all proposals (get rid of the spreadsheets, yay!) and applying more complex funder templates
- Dashboards and reporting provides them an easy view of how proposals and projects are tracking however it has taken us some time to get these right
- Feedback from their academics and staff has been really positive

Being a development partner

Benefits and challenges

- Influencing development
- Being the first also has meant a commitment to sharing experiences with other institutions
- Now much better at requirements gathering
 - Tend to work with requirements rather than completely off the shelf
- Building software that is bespoke is expensive to continuously improve on) – moved to community driven approach (configuration not customisation)
- Legacy architecture - having to migrate to the core platform – complicated exercise
- Constant state of development
- Lack of documentation as we build and go live
- Catching up – newer clients get functionality sooner



Image by [Gerd Altmann](#) from [Pixabay](#)

A single system managing many processes

Benefits and challenges

- Our researchers only have to think about (and engage with) one system
 - Effective communication across the University
 - Holistic approach
 - Reduced data entry
-
- Conversations need to involve range of stakeholders
 - Reliant on where the business priorities have been – influenced order of development work

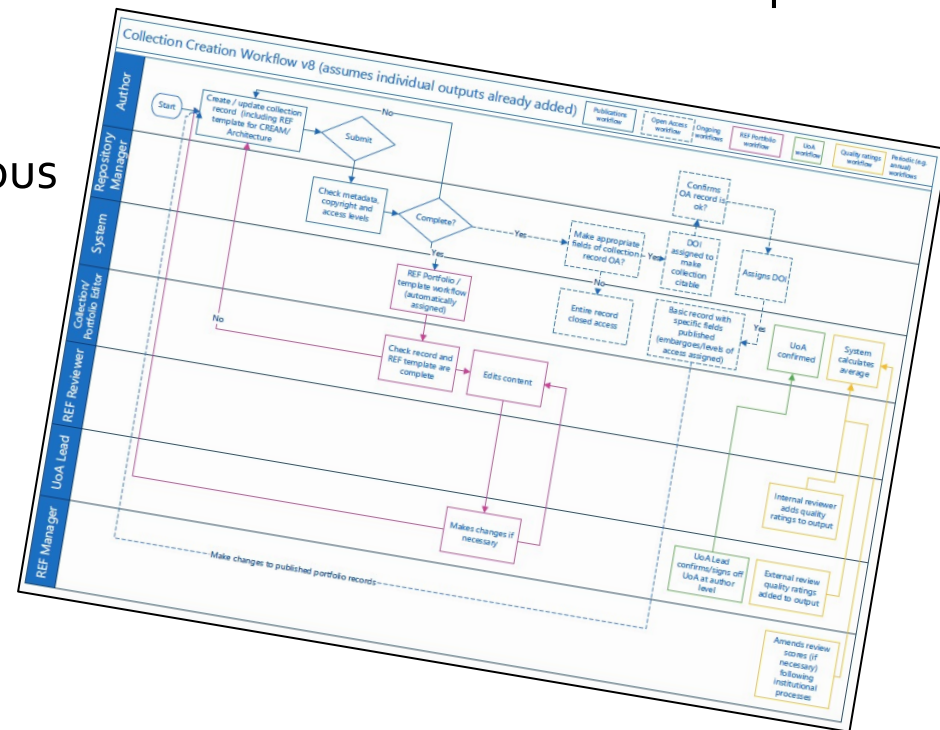
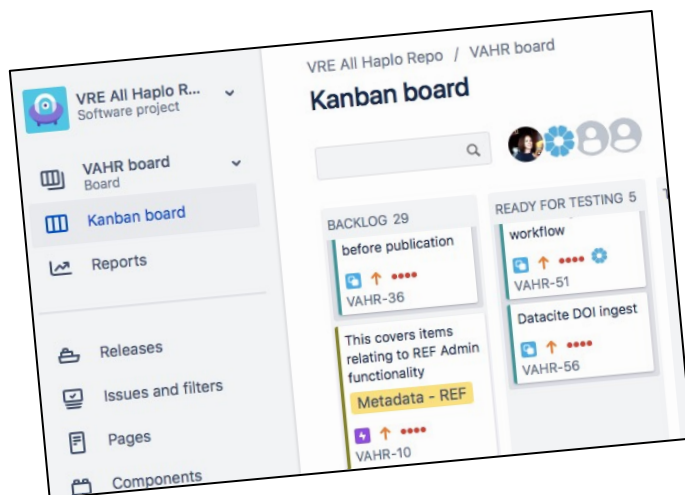


Lessons learned

- Process mapping (understanding as-is model) to enable planning and mapping of to-be processes
- Requirements gathering can be never ending – need to understand when to stop
 - Flexibility of the software means that it can be adjusted post go-live
- Documenting what is agreed
- Getting better at understanding requirements reduces likelihood of scope creep
- Having regular supplier meetings
- Some years have been quite ambitious

“The road to uselessness is paved with flexibility”

Unknown, 2004-5



Data management planning (DMP)

Future developments

- Aim: to create a living (form) that can be used when we implement post-award
- Encourage researchers to think about data collection (type of data, expected size, personal data)
- Embed guidance and links (e.g. to ISS Service Desk)
- Create new roles to enable tasks to be pushed to appropriate person
- Will share data with Ethics and Funding modules therefore reducing data entry
- Can also be exported into Funder DMP template requirements

Edit data management plan

Data management plan **Datasets** Costs Ethical issues

This dataset has been deposited.

Title *

Labelled, weighted networks of chemical-disease relationships

Description of the dataset

This release contains the annotated network for the September 15, 2019 version of PubTator. The version discussed in our paper, below, is an older one - from April 30, 2016. If you're interested in that network, it can be found in Version 1 of this repository. We will be releasing updated networks

Type of dataset *

Archive

Expected size of dataset

1TB +

Keywords to describe the dataset

Enter one keyword per box

Add another

Does this dataset contain personal data? *

Yes

No

Unknown

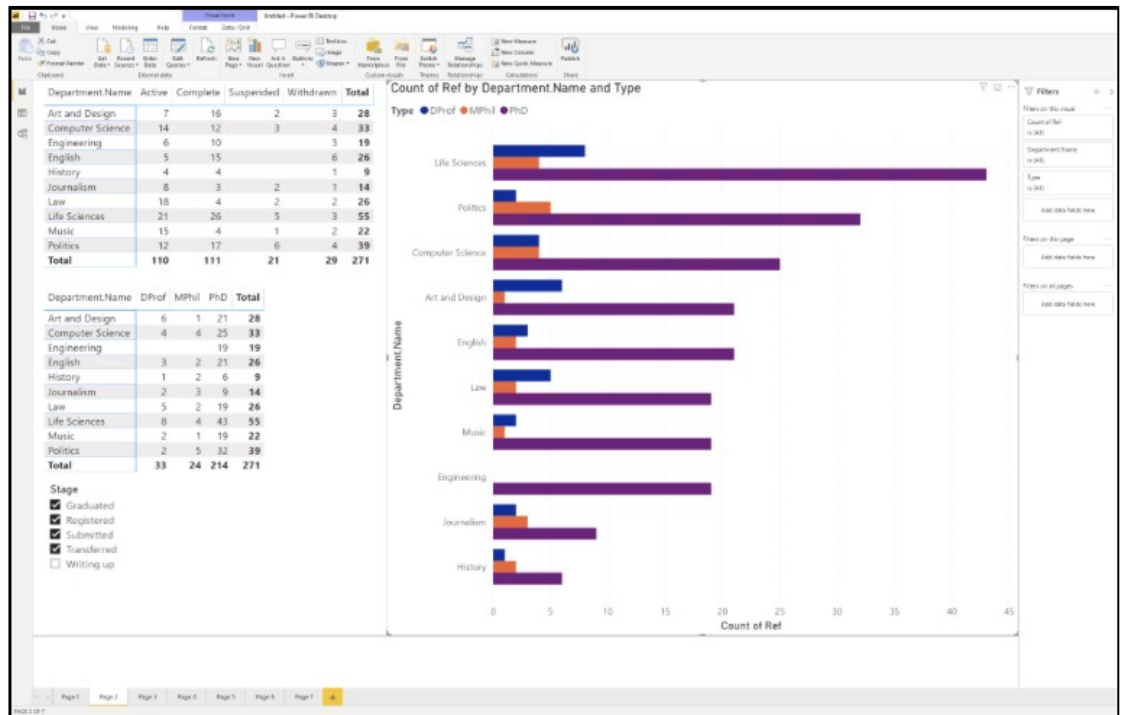
Reporting

Future developments

Existing dashboard view and reports provide a view of data and are downloadable

LSBU working on PowerBI implementation for more visual reporting

Westminster looking to set up feed to in-house data warehouse to enable Qlikview integration



Example Power BI visualisation

Thank you!

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<https://westminsterresearch.westminster.ac.uk/researcher/gyx92/miss-jenny-evans>

<https://www.haplo.com>

<https://cayuse.com>