

Strategies for building outreach and support at the University of Edinburgh

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Research Data Management service key dates

July 2010 – May 2011

- In 2010 a research data storage paper was submitted to the University's IT Committee with six key recommendations for the University's data infrastructure:
 - 1. Archiving of research data
 - 2. Accessibility of research data to all virtual collaborators
 - 3. Globally-accessible, cross-platform file store
 - 4. Back up and synchronization of data on mobile devices
 - 5. Establishing networks of knowledge
 - 6. Federated structure for local data storage
- Followed by the Research Data Management Policy in May 2011 written by the Information Services RDM Action Group and approved by the RDM Steering Committee.



Research Data Management Policy

This policy for managing research data was approved by the University Court on 16 May, 2011.

The University adopts the following policy on Research Data Management. It is acknowledged that this is an aspirational policy, and that implementation will take some years.

- Research data will be managed to the highest standards throughout the research data lifecycle as part of the University's commitment to research excellence.
- Responsibility for research data management through a sound research data management plan during any research project or programme lies primarily with Principal Investigators (Pis).
- All new research proposals [from date of adoption] must include research data management plans or protocols that explicitly address data capture, management, integrity, confidentiality, retention, sharing and publication.
- The University will provide training, support, advice and where appropriate guidelines and templates for the research data management and research data management plans.
- The University will provide mechanisms and services for storage, backup, registration, deposit and retention of research data assets in support of current and future access, during and after completion of research projects.
- 6. Any data which is retained elsewhere, for example in an international data service or domain repository should be registered with the University.
- Research data management plans must ensure that research data are available for access and re-use where appropriate and under appropriate safeguards.
- 8. The legitimate interests of the subjects of research data must be protected.
- Research data of future historical interest, and all research data that represent records of the University, including data that substantiate research findings, will be offered and assessed for deposit and retention in an appropriate national or international data service or domain repository, or a University repository.
- Exclusive rights to reuse or publish research data should not be handed over to commercial publishers or agents without retaining the rights to make the data openly available for re-use, unless this is a condition of funding.

Related Information

- University Research Data Service
- University Research Data Roadmap

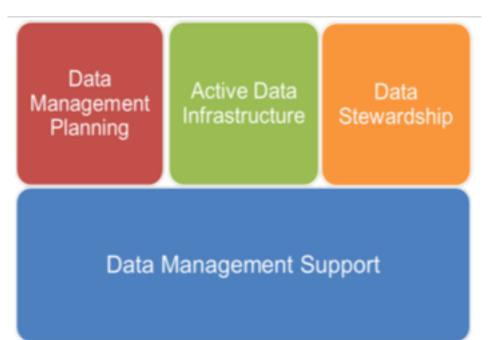


RDM Roadmap V2.0

August 2012 – July 2016

- Business Case submitted to the
 University IT Committee in June 2012
- The Roadmap set out a high level plan for delivery of services across four strategic areas (image on the right):

To provide clear information to all University staff on the progress that has been made in delivering the RDM programme.





RDM Roadmap: Data Management Planning (example)

Data Management Planning

Support and services for planning activities that are typically performed before research data is collected or created.

Addresses RDM policy clauses 3, 4.

Objective	Outcomes	Actions	Deliverables	Target date
1. Tailored DMP assistance for PIs submitting research	Better alignment between IS, ERI and schools	Analyse recent DMPs in research proposals	Set of successful examples of submitted DMPs gathered from ERI and schools	Phase 3
proposals	PIs have access to appropriate, accurate information about IS RDM services for their grant proposals	Trial fast turnaround advisory service with nominated PIs	DMP 'response team' established within IS if deemed necessary	Phase 4
2. Customise DMP Online for optimal UoE use		Evaluate DMPonline and analyse user requirements	University branded DMP Online tool	Phase 1 (Completed)
management plan		Refine tool or fully adopt the DCC version, adding UoE specific questions and guidance	Boilerplate text about IS services for use in DMPs	Phase 3 (Underway)
		Advertise to schools that customised DMP templates can be created for their researchers as required	Research support staff and research committees are aware of the potential to customise it for their school.	Phase 3 (Underway)
		Create customised DMPonline templates for schools on request	Respond to demand from schools as it arises	Ongoing
		Metrics and reporting of DMP creation and use	Monthly reports on number of new DMP's created	Ongoing

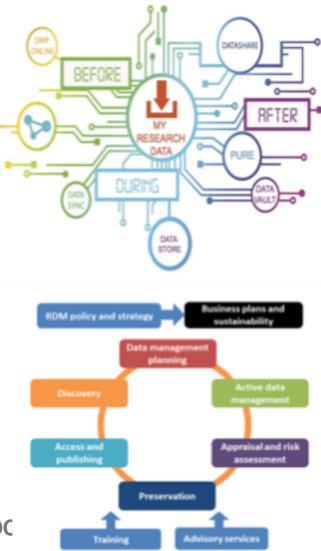


RDM Support

Current tools and support

- Create a data management plan:
 DMPonline
- Finding and analyzing data: Data Library & Consultancy
- Storing data: DataStore
- Synchronising data: DataSync
- Versioning software: Subversion/GitLab
- Recording datasets: PURE
- Sharing open data: DataShare
- Archiving data: Data Vault
- Working with personal and confidential data: Data Safe Haven
- Training: MANTRA <u>https://mantra.edina.ac.uk</u>,
 The Research Data Management and Sharing MOOC

https://www.coursera.org/learn/data-management



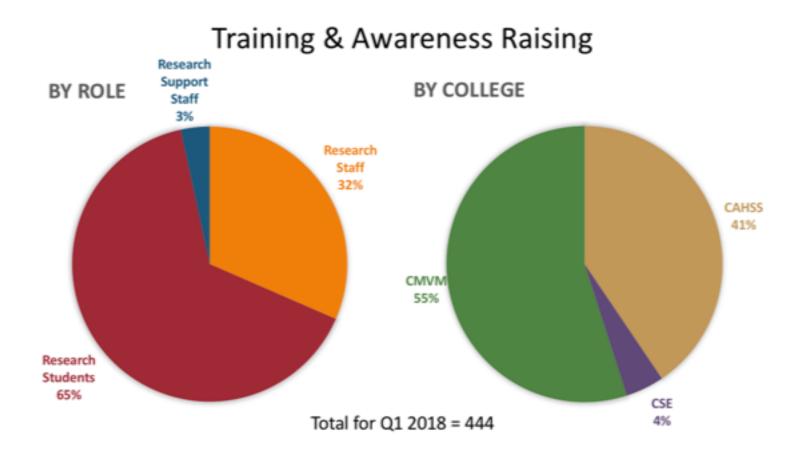


RDM Outreach & Support

Current landscape

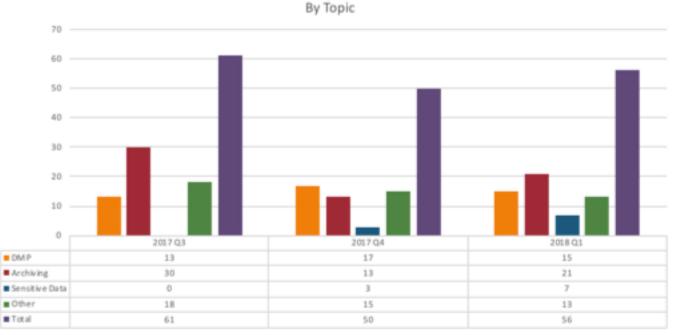
- Support for ~ 20000 users divided between 8 members of staff
- Awareness raising presentations
- Staff induction events
- RDM Forum (one per semester)
- Dealing with Data one day conference
- Datablog (available externally)
- Support is available on demand for all aspects of RDM
- Requests are managed using the UniDesk customer service management system
- A dedicated "writing a DMP" training courses (3-8 per week; each 1hr long)
- Regularly scheduled training for PGRs, research staff and support staff, and on demand/tailored (1-2 per month)
- Online training (MANTRA and a MOOC)
- Future Plans: Online training courses and embedding RDM training in all new staff and PGR induction courses
- Challenges: dmp planning (33%), data preservation and sharing (how do I get a DOI) (33%) and how do I find existing data that I can reuse (33%)?







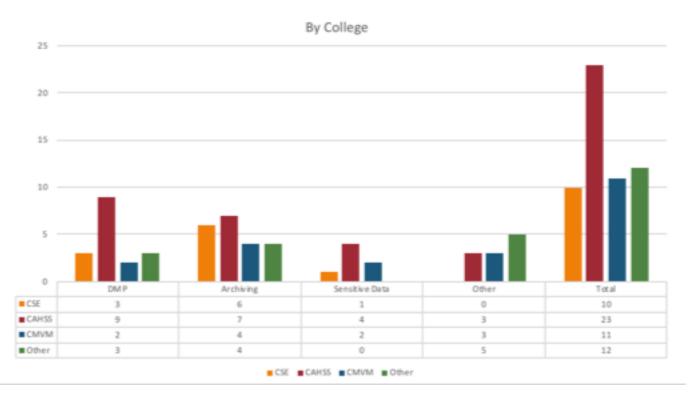
Requests for Support (Unidesk)



DMP Archiving Sensitive Data Other Total

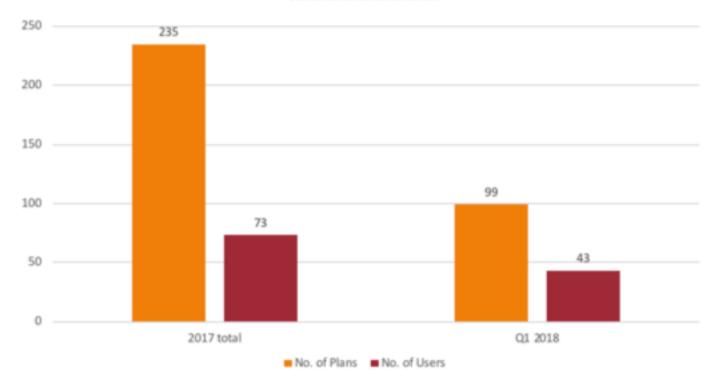


Requests for Support (Unidesk)



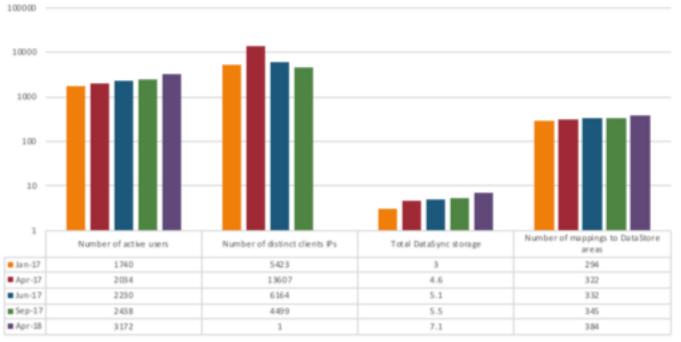


DMPonline



Digital Curation Centre

DataSync



■ Jan-17 ■ Apr-17 ■ Jun-17 ■ Sep-17 ■ Apr-18



RDM -> Research Data Service Roadmap V3.2

August 2017 – July 2020

New strategic area: unification of the service

- Researchers expect a seamless service experience.
- Millenials' expect the same quality of services like from Apple or Google.
- The organisations are moving away from focusing on cost reduction and concentrate on delivering customer-centric experiences and innovations.
- University libraries: from collection holders to service providers and towards the "open science turn".
- IF THE SERVICE ISN'T RELEVANT FOR THE PEOPLE USING THEM, THEY'LL GO ELSEWHERE!



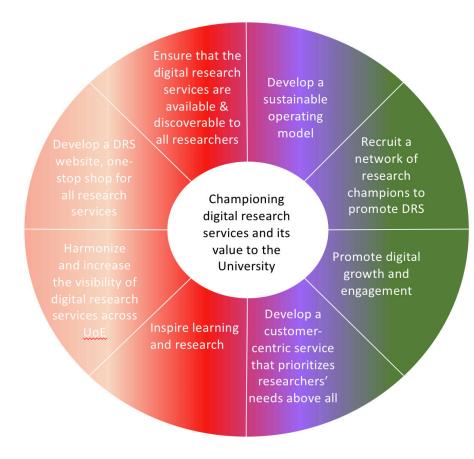


DRS Objectives

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Digital Research Services is a programme to underpin and transform research with an integrated set of comprehensive Digital Research Services in partnership with DCC, Edina and Data Library, EPCC, IS Research Services, IS Research Data Service and Software Sustainability Institute (SSI).

Towards the greater discoverability of digital research services at the University of Edinburgh





Our methodology

Where are we now?

Understanding the current digital research landscape across the University

Research

 Interviews with researchers x 9

- Surveys
- Workshops

Analysis

- Stakeholder mapping
- Audience/Message Matrix
- Communications
- Management Plans
- Core service providers workshop

Where do we want to be?

Improving access, visibility and discoverability of digital research services

Analysis

- Information, issues and insight identification
- Draft brand framework defined
- Draft website narrative
- Drait website harrative

Improved digital presence

- Website creative development
- Production of written creative bief

Support for digital research:

- guidance and training
- signposting to technical expertise
- digital research service catalogue

Can we get there?

Testing initial findings to identify potential barriers to success

Creative development

- Design concepts
- Presentation and feedback
- Design development (includes website design)

Website Testing

- Prototype testing
- Steering group presentation

How do we get there?

Defining the various elements of the DRS Outreach project that will map the way to success

Defined brand

- Brand personality
- Brand proposition

DRS website

 Coherent presentation of services

Comms/Engagement plan

- Outline media, message &
- audience matrix
- Internal and external audience

Network of Research Champions

 Recruitment of Research Facilitators x3 and Research Ambassadors

Digital Research Service Catalogue

July

Stakeholder analysis

Key stakeholders (high interest and influence)	Best person to engage	Supportive/negative/ ambivalent	Notes

Message/audience matrix

Stakeholders	Think now	Should think	Timescales	Channels of communications	Communi cation managem
					ent plan
					(person responsibl e)
					,

Stakeholder mappings

Stakeholder Analysis

1					
High	IS Directors IT Infrastructure	CIO DRS Outreach Head of College IT Steering Group			
		Research Facilitators Research Research Ambassadors Data Service			
	Keep Satisfied	SSI EPCC Edina Research			
	Institute for Academic Development	DCC Library Computing			
		Research admins Research Office			
	Students and Researchers	Research Software Engineers			
Power	IT Consultancy	Computing Officers Digital Skills and Training			
		Communications and Marketing			
	Monitor (Minimum Effort)	Keep Informed			
Low	Edinburgh Innovations				
1					

Low

Communications Management Plan

Stakeholders	WHAT will be said (Think of concrete example s of benefits the project will deliver)	WHEN will it be said	WHO will say it	MEDIA CHANNELS (blogs, f2f meetings, mailing lists, etc.)	FREQUENCY	OWNER

User research: Data and compute services

DCC, EPCC, SSI, IS Research Services, IS Research Data Service, Edina...

- ARCHER
- Cirrus
- DMPonline
- DataStore
- DataSync
- DataVault
- Digimap
- Eddie
- Eleanor
- MANTRA
- Software Carpentry
- Supercomputing MOOC

- The Research Data Management and Sharing MOOC
- PURE
- How could we make services easier to find and use?
- What sort of information would you like to know about each service?
- How would you expect new or junior colleague to discover services available to them?
- What would convince you that the particular service is the right one to use?



Findings: How do you currently find out about research services at the University?

-> Word of mouth is currently the strongest route for finding out information about services, but also welcomed as it's easier to get answers to specific questions. For many, a direct contact either within their own school or responsible for specific service would be ideal:

"It applies to all services at the University - Information does not seem to be written anywhere. IT services are actually a bit better than finding information about other things, e.g. teaching. **The obvious solution: speak to your colleagues."**

-> Note two very different experiences:

"The University came to us" (researcher at IGMM)

"Social scientists study communities online and need proper tools for that. New tools include scrapers, ways to integrate (data mining, etc.). Some of the courses are provided by the School of Humanities...**I am new and I know nothing so we try to make things happen by ourselves** -> for example organise a workshop with the Alan Turing Institute" (researcher at

ISST&I).



Findings: How could we make the digital research services easier to find and use?

-> Users want to be able to browse and search a complete list of all digital research services in one place (confirmed by the interviews and workshop, especially given the lack of understanding of even where to find out about services, whether from a central or at school level).

"Useful high-level description of services so that it's easier to understand the differences between services, e.g. what's the difference between vault and store?"

"I have a need to do HPC, what is available? Information is there but not so easy to find directly and to understand. For instance, not clear how much I can use Eddie for free. What should I expect under free usage? What is realistic? If you make this information more available, people will have more incentive to pay"

-> A number of interviewees made it clear that they were also after support around running their research projects, whether that's in planning (writing data management plans or writing proposals) or actually conducting research (manipulating, storing and managing data). This may be covered by relevant training or with documentation or articles around best practice:

"a technically-capable consultant able to translate requirements and architect solutions from the available services"



Findings: Information about services

-> In order to convince users of a particular service, case studies are important. Other content about a service should include a short summary, explanation of what the service is and what it's suitable for, how to get access to it, costs or detail on how to find out accurate costs, detail about capacity and data security, and a designated contact. Services must also be easy to use and user-friendly:

"Some things you have to use because you are told to. The easier something is to use (services that are more elastic, easier to access, easier to understand) the more likely you are to use it. Also people who will not be here long don't have an incentive to use Edinburgh-specific services"





Findings: Other comments

-> On collaboration:

"Collaboration is needed both at the grant application stage and at the research stage and it is one of these things that you often don't know how to do. **The minute you want to start sharing with collaborators, things start getting more complicated**. In collaboration, you do things one way and then when you want other people to have access to this for the purposes of bigger projects/workshops, it gets complicated. A large part of it is access control – sharing and restricting sharing".

-> On training: Strong preference for a training delivered either on-site or online. Also...

"there is a slight disconnect here. We've got all the services but researchers still struggle with best practice regarding data collection and structure, databases, data cleaning, data normalisation"



DRS Outreach

- Research Facilitator Lead appointed, interviewing for facilitators posts.
- Two workshops with service providers.
- Two workshops with research administrators (part of RDMF event).
- 10 interviews with researchers (ongoing).
- 16 surveys with researchers.
- User Working Group set up to create user feedback loops.
- Outreach: presentations at team meetings (Data Library, IT Consultants), meetings with key stakeholders from the Colleges, IAD, CAM ongoing.
- Key stakeholders mapped by College (see slide 23).
- Online and face-to-face data awareness training to be delivered by DCC.
- All results from user research shared on a wiki: https://www.wiki.ed.ac.uk/displav/DRS
- Light-touch branding created.
- Research Ambassadors programme.



DRS Outreach: Research ambassadors programme

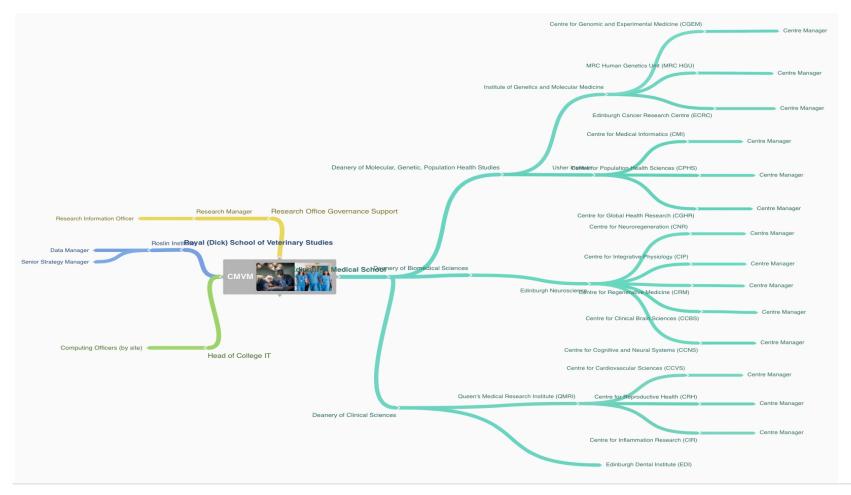
Aims:

- To facilitate knowledge exchange among researchers and through this increase the visibility of services.
- To facilitate a 'Community of Practice": "groups" of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an going basis" (Wenger, McDermott and Snyder, 2002)
- To improve communications across a decentralized institution.
- To foster a shared sense of purpose.
- Researcher-led approach to data and compute services.
- Challenges: if voluntary what are the "tangible" rewards for participating and will this be enough?



Mappings of key stakeholders: CMVM

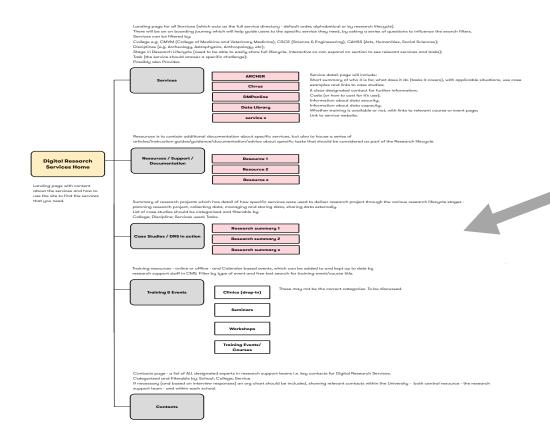
To better understand the interdependencies, relationships and work practices at each College.





Proposed IA (sitemap)

For further feedback



Facilitating a "Community of Practice" – "groups" of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an going basis" (Wenger, McDermott and Snyder, 2002)

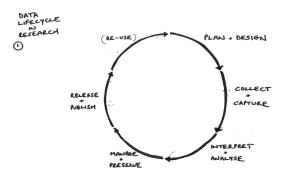




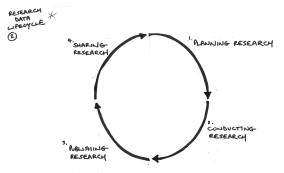
Research lifecycle sketches

For further feedback

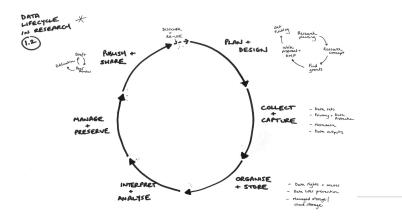
• 1st option: 6 stages



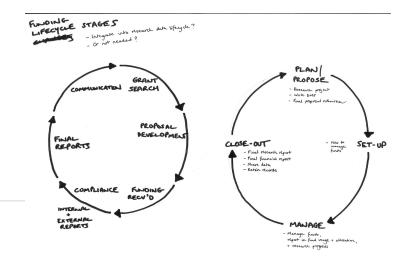
2nd option: 4 stages (simplified version)



 3rd option: variation on the 1st + additional stage around Organization and Storage of data + how each stage might be expanded to include relevant tasks/services



• 4th option: including funding – maybe some of it included in an expanded version?



Mock up of the Services listing page

Shows how the filters could work

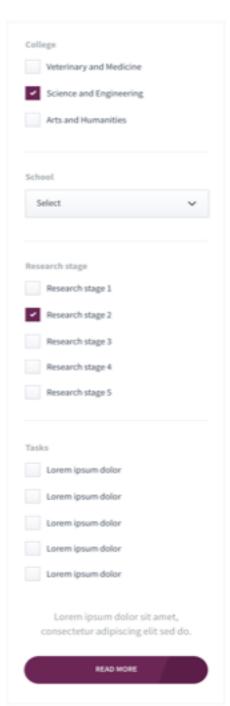


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Feature or General Information

Information on how to get the best from Edinburgh Digital Research Services

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READ MORE

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READ MOR

Conclusions:

- Researchers want connected and user friendly services
- When designing a new service remember to facilitate feedback from the earliest stages of development and place it at the centre of an iterative process
- A *process* nature of services: unlike physical goods, services are dynamic, unfolding over a period of time activities that allow the service to function effectively.
- A service blueprinting can help facilitate the detailed refinement of s single step in the customer process as well as the creation of a comprehensive, visual overview of an entire service:
 - Prepare and move systematically (objectives -> idea generation -> concept dev
 - -> service design -> prototyping -> service launch -> customer feedback).
 - A well-designed service leads to favourable brand evaluations, which in turn leads to increased customer loyalty.
- Always ask yourself:
 - How do we ensure that our services are relevant and easy to use?
 - How can we demonstrate a human touch in the digital world we work in?
 - How do we make sure researchers like working with us?
 - How do we deliver a great experience that reflects the University brand?
 - Can we be more open, transparent and connected?



