

# Guiding researchers to find the appropriate RDM solution

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## Background

Data silos, non-transparent research practices, and scattered research data support are often regarded as blocking issues for innovation and engagement in open research data services. Interestingly, the initiatives to solve these issues and the solutions offered to researchers often are organised in silos as well, and research data management groups work in parallel. Solutions remain difficult to find for researchers. Therefore there is a need for a simple, intuitive search interface for researchers, built on the local, national and international RDM (Research Data Management) resources. For the current RDM award, we propose to organize a hackathon to build an efficient, intuitive and open search portal that can easily be implemented on RDM tools in universities, academic hospitals and other research institutes.

## What

As a means to address the above challenge, we propose the creation of a user-oriented, semantic (Google-like) search portal tailored to researchers. When researchers enter a data management related query in the portal, the system - based on a machine-learning algorithm - retrieves concrete, practical solutions to the data management request of the researcher, presenting steps to be taken and tools to be used.

## How

We plan to organize a hackathon with software developers, data scientists, research support staff of the DFH and researchers with the aim to develop such algorithm. We want the portal to present an intuitive search interface with an optimal developed algorithm to match concrete questions of the researchers with one or more of the available RDM solutions. The translation of the outcome of the hackathon into the production environment will be carried out by the tech staff at the IT center of the University of Groningen. The usability of the solution is key to the success of the portal, and therefore in the engagement of the researcher in RDM. Therefore a professional user-experience designer (Ux) will be hired to develop the interface. The system will be generic and applicable to other universities and knowledge institutes as well.

## Available resources

The Data Federation Hub (DFH) builds on existing excellence from the University of Groningen and University Medical Center of Groningen, and brings together support and expertise in a federated model to increase and widen impact. In Groningen the IT center, the library, the legal department and faculties provide good RDM solutions in their area of expertise. In addition, the DFH provides access to national services (e.g. SURF, DANS) and international resources (e.g. EUDAT, OpenAire). Over the past few years initiatives on research data management have been developed with regard to policies, compliance, training, infrastructure and tools. The DFH connects them, let innovation develop and mature, and shares them to the broader audience of researchers.

## RDME Grant use

Thanks to the RDM award we can hire a professional Ux experienced designer to ensure usability and user-friendliness of the solution, which in turn will boost engagement of researchers in RDM. The IT staff of DFH will implement the outcome to make it available for Groningen researchers. Based on user feedback, the search portal will be further improved. We will offer the portal as Open Source to the international Research Data Management community. The IT staff of the DFH will be available to support IT staff of other institutes that choose to implement the solution in their local environment.

## Timeline

Sept 2018 - Detailed hackathon plan ready  
Oct 2018 - Hackathon kick off (logistic prep ready)  
Nov 2018 - Hackathon  
Nov - Dec 2018 - Implementation of the outcome of the hackathon; documentation of the implementation for wider use.

## Budget

GBP 500: practicalities hackathon (announcements, IT setup, refreshments, pizzas)  
GBP 1250: professional designer (three days)

## Impact

3,000 Groningen-based researchers, to start with. Potentially many more researchers once the implementation is deployed and shared in open source.