RADAR Roadmap: The application of EPrints for the continued development of RADAR at The Glasgow School of Art

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In 2012 I reported to the EPrints user group that the Glasgow School of Art (GSA) had embarked on the development of a research repository utilizing EPrints software. In 2013 I discussed with the group how we have been using our repository to enhance the sharing and re-use of information from within the repository. In this paper I want to express the roadmap for the continued development of RADAR and how EPrints software will contribute to this from the stand point of improved deposits, user friendliness, showcasing of research/research data and the support we have received from EPrints.

RADAR (**R**esearch **A**rt **D**esign **A**rchitecture **R**epository) is the repository at GSA, which has been developed using EPrints services. GSA initiated engagement with EPrints following the acquirement of funding from JISC as part of the Embedding and Take-up funding strand for repository development. This funding allowed GSA to develop a whole new repository system. The development of which started in 2011. Prior to this the repository was housed within a Filemaker database. This database was good at storing the required metadata about research outputs but it lacked in interoperability and had a poor user interface. This instigated our involvement with EPrints. Through research into different repository software we decided to embark on the development of an EPrints based repository. Much of this reasoning came about from GSAs involvement in the Kultivate project run by Centre for Digital Scholarship, a Research Centre of the University for the Creative Arts, who have been engaged with EPrints in developing the software for arts institutes. EPrints is also seen as a common platform for other arts institutional repository – such as The University of the Creative Arts, University of the Arts London, and The Royal College of Arts.

Since instigating work with EPrints and the development of RADAR, the use of the repository has continued to grow. For the past two years since the first iteration of RADAR changes have been made to the interface and the functionality of the repository. One example comes from GSAs involvement in the KAPTUR project that was looking at research data management and how this can be implemented within research repositories, plus the better sharing of information that became a requirement during the Research Excellence Framework (REF) process that all UK higher education institutes have to comply with. It can be said that through continued liaison with EPrints the repository at GSA has been enhanced.

It can be stated that RADAR is being used to manage the research outputs being produced at GSA. Staff are encouraged to upload details of their work and research to the repository to help promote the school but themselves as well. In addition to the basic metadata about the output submitted to RADAR, staff have the ability to upload documents associated with the research – e.g. text files, images, video, data etc. This ability to share documents alongside the basic details about the outputs enhances re-use and knowledge exchange. As RADAR is public facing and linked to the GSA website, external bodies can access the information from the repository, interrogate its content and subsequently learn about the work being undertaken at GSA. This in turn may instigate further communication with the school about specific areas of work, and lead to collaborative work and further knowledge exchange. The open nature of RADAR (such as its visibility in Google searches) and the ability to share details and documents about research in the repository really helps to spread the word about the work being undertaken at GSA, and lead to potential re-use of data amongst the visual arts community.

GSA are keen to maintain the continued development of RADAR in line with requirements of funders and open access agendas, but also the institutional strategic plans and staff and student requirements. With this in mind a 'Roadmap' for developing/enhancing RADAR has been produced. This roadmap illustrates strategic plans for the repository looking at short, medium and long term requirements.

Outlined below are the themes of work that the Roadmap considers. These are areas that will all help to improve and advocate RADAR. Where EPrints will be involved will also be highlighted. The themes are universal in nature, in that they could be used as starting points for other institutes who are embarking on repository improvements.

Submission/Deposit Process

The process of depositing a research output is standard across EPrints repositories, covering the generation of a research output type and the completion of the metadata associated with the output. We are keen to be able to document this process for our repository users (researchers) as this will aid them in the deposit process and highlight the requirements needed for depositing a research output. The process will also tackle the 'review' process for research aspects carried out by administrators, ensuring fair consideration and review of the output is undertaken before making the item 'live' in the repository. In addition to this, a submission policy needs to be generated ensuring staff are aware of what can be uploaded to the repository and issues of copyright/licensing.

Metadata

RADAR contains a vast amount of metadata related to the research outputs that have been deposited. Much of this metadata has been imported into RADAR from the previous Filemaker database and subsequently this needs to be checked to ensure the records are complete for the output, but also that it complies with the output type. With this in mind we are embarking on a 'clean-up' task of existing metadata. We have also performed analysis on the types of metadata being collected in RADAR based on the standard fields set up by EPrints in the system. We have been looking to see whether for an arts institute we need any additional fields or whether we want to alter the requirements for completing specific metadata fields. Much of this work was performed by the Kultivate group. In relation to this we have liaised with EPrints to enable us to add extra fields to the system and to make fields mandatory etc. We are in the process of developing an improved metadata policy, plus considering the use of ORCID and RIOXX.

Access Options

We are keen to develop better standards for the access to the system based on who should be given administrator, editor and user rights within the repository, this is still in discussion. We are also considering the access to actual content within the repository within the context of full text accessibility. Should this only be for staff and students at GSA or should all information be made publically available or available on request? It is likely we will use a combination of accessibility rights to full text information. Plus this will be associated to the options the researchers place on their outputs when depositing documents as these can be viewable by anyone or just repository staff. Plus embargo periods maybe placed on outputs based on funder and publisher guidelines.

RADAR User Interface

This is a big project and much work has been carried out by EPrints following comments from GSA on this since the initiation of the repository. GSA is an Arts Institute therefore we are keen that the repository looks good and reflects the nature of the institute well. At present the repository follows the interface template set out by the general GSA website. We have therefore had to tailor the repository to fit this template. EPrints have worked hard on complying with the template. Recently tweaks have been made to the look and feel of the repository in relation to how text has been displayed on the site.

Documentation

With regard to documentation, GSA are keen to develop simple user guides for researcher to help enhance their use of the repository and to help them get the most out of it. Guides will cover the depositing process and search methodologies. We will also work with EPrints to enhance the policies that are currently present within RADAR.

Communication

This section is very important for GSA. We want to encourage the use of full text and image content in RADAR through the development of a publicity plan. We are also interested in 'launching' RADAR properly within the research environment. We want to showcase the research at GSA to its full potential and enhance staff profiles on the website through the repository, the application of MEprints may benefit this cause.

Reporting

Reporting is becoming much more important at GSA. Schools are demanding to see download statistics and information related to staff within the repository. With this in mind, monthly reporting procedures have been initiated. These make use of the Admin functions within RADAR that allow you to choose fields of interest to report upon. GSA is also now engaging with the IRStats package for enhanced reporting. Reporting is an area that EPrints themselves are tacking further as discussed at OR2013. We hope to be able to disseminate data on deposits, visits to the repository and downloads. Reporting will also be tailored to the schools at GSA, based on their requirements. Reporting also covers the 'Browse' functions in the repository. The standard browse functions are by year, school and author. Within RADAR we intend on combining these browse functions to allow a viewer of the repository to browse by school and author at the same time, such that we have grouped the outputs provided by a researcher into their allocated school. The purpose of this is to enhance the search capabilities within the repository and make it easier for people to find outputs.

Research Pipeline

GSA is developing a research pipeline database whose aim is to track the progress of research bids from inception to completion. Our aim is that RADAR will fit in with this system being developed in Filemaker to help ensure that during a research project information on outputs gets uploaded within the repository. It will be necessary to give EPrints access to this pipeline system to help enable them to integrate the two management systems.

Open Access

There is a need to increase the amount of open access content in RADAR to comply with the Open Access agendas. Support is required for staff in this to ensure they comply with the requirements of open access set out by specific journals etc.

Research Data Management

GSA was part of the KAPTUR project that was looking at RDM policies and systems that could handle research data. EPrints was deemed the most suitable and we hope to be able to engage with them to start to develop functionality within RADAR to handle research data. Another project that GSA are involved in, VADS4R, is helping GSA to understand research data in the visual arts further and helping to share this knowledge with its researchers which in turn will enhance the use of the repository in terms of RDM. Training sessions and toolkits have been developed to aid this process.

Repository Infrastructure

EPrints host and manage the repository at GSA and we have a silver level of assistance with regard to help and bug fixing. This is an element we continue to review and are keen to learn when new iterations of the EPrints software have been developed and implemented within RADAR.

Thesis Submission Process

This will be a new element added to RADAR, to enable students to be able to deposit their PhD and Masters theses. We will need to engage with EPrints for the implementation of this

process as we will need to enable students to be 'users' in the system to be able to deposit their thesis, plus additional metadata fields and processes for depositing will be required. Other institutes have thesis submission within their repositories e.g. Enlighten at Glasgow University, so we will be able to learn from them as well as EPrints with regard to this process.

These themes for the continued development of RADAR can also be given different priority ratings. For example, aspects related to metadata, user interface and reporting are seen as high priority, while the research pipeline and open access (currently) are low priority. The development of this roadmap also fits with the strategic planning for Learning Resources at The Glasgow School of Art.

By developing this roadmap, focus on what is required to enhance and improve RADAR for users and administrators has been stipulated. This approach can be utilized by other institutes who are looking at the continued development of their repositories. It is important to be able to document the requirements needed and to be able to express a level of importance for the different areas. We envisage using this roadmap to give continued structure to the development of RADAR at GSA. However it must also be noted that as we embark on tackling the areas covered in the roadmap, new elements might arise as the repository community develops, software changes, requirements change (funder and institutional), and ecosystems for repositories develop.