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Embracing the Future

Embedding digital repositories in
the University of London

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Executive summary

For higher education institutions (HEIs) digital repositories are strategic instruments to develop coherent and coordinated approaches to the capture, identification, storage and retrieval of intellectual assets such as datasets, course material and research papers. Many HEIs have now set up digital repositories. SHERPA-LEAP, a consortium of 13 institutions, is one of the first networks of e-prints repositories in the UK to be fully functional and operating. The SHERPA-LEAP leadership has been concerned about the strategic commitment of HEIs to repository sustainability. This study informs the consortium with an assessment of current awareness and attitudes of stakeholders regarding digital repositories in three case study institutions.

The main purpose of this report was to complement the holistic espida[3] approach by focusing on the customer and stakeholder perspective. The findings therefore should be of use to decision-makers involved in the development of digital repositories. Our approach was entirely based on consultations with specific groups of stakeholders in three institutions through interviews with specific individuals. We held two workshops with the EMBRACE project board to share our findings. In this study we have tried to answer four questions. We briefly summarise these here and delineate several higher level lessons for decision-makers in HEIs.

1. To what extent are the institutions strategically committed to repository sustainability, specifically considering the institutional stewardship of digital assets?

Overall, the interviews seemed to validate the hypothesis of the EMBRACE project board that digital repositories are currently underutilised, and that there are significant barriers to a strategic commitment. However, the findings revealed a complicated picture of disciplinary differences, departmental and institutional differences, and heterogeneity between and within stakeholder groups. This relative lack of a strategic commitment cannot be attributed to fundamental disapproval of the concept of digital repositories: there does not seem to be any stakeholder group that opposes the development of and investment in this infrastructure. Rather, as noted in the espida handbook (University of Glasgow/JISC 2007), the potential benefits are intangible, they will not be visible until a critical mass is reached, and there is as yet little (quantitative) evidence that the benefits will outweigh the costs.

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[3] Espida was a project funded by the JISC to make the business case for proposals that may not necessarily offer immediate financial benefits to an organisation, but may bring benefit in more intangible ways. See, for instance, http://www.gla.ac.uk/espida/documentation.shtml. Accessed: August 2008.

2. What are the motivations for different stakeholders to support digital repositories?

HEIs currently lack a coherent vision of how digital repositories can assist these organisations in accomplishing their mission. This is partly due to the notion that a digital repository is a multi-purpose technological utility that facilitates collecting, registering, archiving, linking, preserving and providing access to digital objects. The interviews revealed a range of different motivations for investing in digital repositories. Different groups of stakeholders seem to have a different picture of what a repository is and what it should or could do. Although the sample of interviewees was small, some tentative generalisations can be made:

- Library staff strongly supported the increased accessibility of research outcomes and having more control of the archiving and preservation of institutional intellectual assets.

- Senior management and department heads predominantly support the opportunities offered by digital repositories to facilitate collecting and organising (annual) research output as an input to research assessments for funding.

- Researchers tend to be more motivated by publishing their results in prestigious journals, not least for funding, tenure and promotion considerations. It is more common to disseminate unpublished papers in some disciplines (e.g., economics) than in others (e.g., biomedical sciences).

It seems to be mainly staff with externally facing functions (e.g. External Affairs) that are most motivated by the opportunities to showcase the institution's research in a centralised location.

3. What are the barriers, if any, to embedding digital repositories in institutional strategy?

Digital repositories may well be victims of their own success. Given their range of potential benefits, stakeholders have different views of how to use digital repositories. The absence of a shared understanding of these repositories may be one of the main barriers to embedding these systems in HEIs' daily operations. We consider that buy-in from the wider community is a crucial condition for achieving a sustainable digital repository with a critical mass. One factor in this is the dependence of the repository on the research community for its content. However, it is very difficult to provide evidence of all these benefits.

Even if most of the barriers identified in this report – e.g., the lack of awareness, a technology that is in its infancy, risks of reputation damage, or the administrative burden of depositing – can be overcome, one major challenge remains for digital repositories, namely the lack of incentives for the wider institutional community to provide content for these repositories. Funding, tenure and promotion are important drivers for researchers; digital repositories will be embedded in HEIs' daily operation when depositing research output contributes to any of the above-mentioned factors – in short, when the incentives of those depositing are aligned to the strategic objective of the repository.

4. Which measures are suitable for pursuing a strategic commitment to resourcing and sustaining repositories of digital assets in HEIs?

The interviewees identified a range of interventions that might overcome some of the barriers to embedding digital repositories and achieve the continuity of viable and sustainable repositories. In some cases these followed logically from the barriers that they identified earlier. For instance, given the lack of clarity among stakeholders about what a digital repository is or should be, several suggested targeted information campaigns to engage with the stakeholder community. In general, the interventions suggested by the interviewees could be categorised in two main areas: those related to developing a strategy and creating a shared vision of digital repositories across the institution; and those related to achieving buy-in and communicating with the key stakeholders. The first category consisted of recommendations about reconciling the competing visions of what a digital repository is, allocating dedicated resources to support the process of depositing, and aligning the incentives of the stakeholders with the strategic objectives of the repository. The second category consists of different ways of communicating with the stakeholders, informing them of what the digital repository is and seeking their views as to how to improve the repository strategy and the services offered by the repository.

5. Discussion

While undertaking this study, a clear theme emerged. There appears a misalignment between the objectives of the repository and the needs of different groups of stakeholders. It is hard to establish whether this problem arises from the lack of a clear repository strategy or because the stakeholders are unaware of the strategic objectives. The views of interviewees pointed in both directions. Certain mechanisms that could address this problem are undertaken to different degrees across institutions; for example: aligning the incentives of stakeholders with the objectives of the repository, informing the stakeholders of the repository and overcoming copyright constraints.

All this also has an important knock-on effect. As the digital repository depends on engagement from the stakeholders in order to achieve a critical mass and show its value to the institution, a lack of buy-in from the stakeholders could undermine the projects in the medium to long term.

While espida has proved a useful tool to support the development of repository projects and attract funding, this study indicates that stakeholder buy-in is a key factor in successfully embedding digital repositories in institutional strategies and their day-to-day operation. In short, the strategies of digital repositories need to reflect the needs of stakeholders and the repository objectives must be aligned with their incentives.

In this report we have given some indications of how the motivations of stakeholders differ (Chapter 2) and the different barriers to embedding digital repositories that stakeholders perceive (Chapter 3). Digital repository managers could map their potential objectives against the motivations of stakeholders and the barriers that they perceive. This would allow repository managers to adjust their strategy to specific motivations as they receive feedback from groups of stakeholders, to communicate clearly what they are trying to achieve and to devise specific and targeted interventions to overcome the barriers relevant to the stakeholder groups that they seek to engage. This, in turn, could lead to sustained support from the institution and the embedding of the repository in institutional strategy.