

Bottom(s) up to a Top down approach

Peter Linde, Librarian, Blekinge Institute of Technology (BTH)

peter.linde@bth.se



It is comparatively easy to build and structure an institutional repository. The difficulty lies in filling it with content. This very trivial observation is not uncommon among repository administrators and I certainly agree. At Blekinge Institute of Technology (BTH) we have followed a Bottom up approach, which now, almost ten years later, hopefully will lead to a Top down policy. The two strategies complement each other and maybe a two-front approach can be part of an answer on how to get submissions going.

Before Open Access

In 1997, when we started building our Institutional repository [1] nobody talked about Open Access. The phrase on every librarian's lips was rather "Digital libraries". We had a fair idea what a digital library should offer its customers and one big thing in our mind was serving full text documents produced at BTH. During the spring term of 1997, on a library initiative, an interim research editorial committee, headed by the vice-rector, was formed to streamline the publishing, distribution and storage of the department's research material. One of the tasks for this committee was to seek funds for developing a database as an electronic catalogue of research material. The project was named DELFIN (Direkt Elektronisk Lagring av ForskningsINformation = direct electronic storage of research information). The first thing the committee had to do was to specify guidelines for processing

research material at the University. For the system to work it was essential to ensure the reliable delivery of material from the various departments. The committee agreed that the written word was the best way to present research at the University. In this way a profile of the University could be presented, contacts formed and maintained with institutions and sponsors, while the University would become part of the scientific community.

We got our funding and were soon able to get started. Since we were supposed to be a model vanguard university library with focus on applied Information Technology, we felt we could build an archive that hosted all the university's research documents both as bibliographic records and in full text. Contributing to this megalomania was of course the notion that we were a young (founded 1989) and small sized organisation (ca. 4000 students). We had been a short way down the SGML road but it was a pretty ugly experience and we were not particularly keen on working that hard or spending that kind of money. Instead we turned our hopes to the new PDF-format. At that time researchers submitted PostScript files, which we converted to PDF at the library.

Our aim was to create a database, which could be maintained and developed within the existing organisation of our library. Technology itself was not our strong point. For this reason we wished to avoid having to write our own software or order custom-made software from outside consultants. So we appraised software from major reliable firms that could provide ready-made well-tested database systems compatible with WWW and who could guarantee up-upgrades. Our final choice was Lotus Notes produced by Lotus Inc., a subsidiary of IBM that at the time was running at BTH and from which we had minor programming experience. With just a little support we were able to develop precisely the WWW-interface we wanted, and in doing so were able to retain and even enhance our own ability to administer the system. The starting point for the design was that the researchers themselves, using a web form, entered the data into the system. This meant that they did not need to learn to use any new software and that all information received came directly from the original source. We tried to do everything to minimise the work involved in creating new records since the whole idea was based on researchers voluntarily submitting their data.

Researchers and...

The creation of the database was done under the wings of the editorial committee with feedback from the future contributors. A short time after the launching of the database the vice rector unfortunately got a new job and moved along. The editorial committee sort of died away after that and we lost our main connections within the university boardrooms. But we had our

research database and more or less everybody at BTH knew about it, even though many researchers were sceptical, especially the ones from the Computer Science department.

To keep our baby alive we tried to visit all the departments, tried to inform researchers in meetings at their workplace about the possibilities and the advantages of collecting all research documents in a central repository. During the years we have used web questionnaires for feedback when upgrades or major new facilities were being added to the research database. We always tried to have a sensitive ear for researchers requests or ideas of improvements ranging from new subject entries, document types to background colour. We have marketed Open Access and our research database in library courses on information retrieval given to postgraduate students and teachers. We have made the database compatible with the OAI-PMH [2] and made it searchable from OAISTER [3] and Google Scholar [4]. All as an effort to make it more attractive for researchers. The database is now an integral part, together with our bachelor/master theses archive, of the library services at BTH even though submission of research material is still voluntary and far from 100%. Now, in early 2006 we have about 1600 records and some 600 of them are in full text. In most academic environments departments usually have their own publication policies. We have therefore constantly had to justify the database, outlining its advantages for researchers and the departments, and have consequently understood the importance of promotion and sensitivity to researchers' needs. To be able to offer researchers a viable and advantageous system is important, but equally so is that the system can handle and disseminate research documents in a way that is useful for the whole organisation.

There is of course a problem with voluntary submission – you have to argue with and remind people constantly and most of the time it does not help very much. But there is also a problem with submission under orders – It might work in a commercial environment but in an academic organisation orders from above are in many cases challenged. With this in mind we have tried to work both the bottom up and the top down strategies. The whole project started as a bottom up initiative, and I think it would not have existed if we had not worked from this angle.

...administrators

Having noticed how the submissions dropped after the first years of production and heavy marketing, the library director started to approach the faculty board trying to convince them of the usefulness for the board of a repository that carried all the University's research documents. An idea was brought forward in 2001 that since the Faculty board is the preparing body concerning

the allocation of research funds it could instruct the departments that all BTH research documents that were referenced to in the applications should be submitted in the BTH research database. This was discussed but never decided and put to actual practice but it would have been nice! The discussion in the faculty board gave one major practical result though when it inspired the most research productive department at the time – The Department of Signal Processing – to hire a secretary to collect and enter all their research documents into the database. This was vital and gave the database a more significant relevance and stamp of approval.

Fear of violating copyright has been an important factor for researchers deciding not to submit full text documents. Our advice has usually been: If in doubt – publish. If there is any protest from the copyright owner we will immediately take away the full text file. With the Romeo/Sherpa [5] project things have changed quite a bit for the better. Now you can in a very easy and pedagogic way find out and disseminate what the Open Access deal is with most major publishers and feel a bit more comfortable about whether to publish full text or not. A great tool in our arsenal of arguments!

Another important "survival factor" has been the use of the database as a provider of references of scientific publishing for the university's annual report and for the publishing reports every four years to the ministry of Education. I remember some years ago when the director of administration wanted me to tap the repository for all peer reviewed scientific documents for the ministry report. I sent him the lists, that were not very impressive in volume, with the header "Submitted documents to the BTH research database 200X". He called me back next morning and asked if this was really all we had produced? I said: Read the header! In the afternoon there was a mail to all staff from the director saying that in a week a report was being sent to the ministry of Education supplemented by a list of research documents produced at BTH and that the list was extracted from the BTH research database. That week we had a rush of submitters! This incident is for me proof that also administrative uses must be considered and can be used as carrots or positive incitements for submitting researchers.

Open Access policy?

With the strengthening of the Open Access movement, signing of the Berlin Declaration [6] by the Swedish Research Council plus the Association of Swedish Higher Education and inspired by the decision of the Board of Lund University [7] we at the library now have written a suggestion for an Open Access policy to be forwarded to the Board of BTH. It goes a step further than Lund's statement since it recommends the board of BTH to approve the following two principles:

- That every scientific document published by staff at BTH shall be deposited as a copy in digital form at the research database at BTH and that free access is given to the document when copyright or secrecy rulings are not applicable.
- That writers at BTH are recommended to publish research articles in Open Access Scientific journals when suitable journals of this type are available.

Hopefully the board will decide this policy later this spring. It certainly would help to strengthen our research database as a viable resource in the minds of our researchers. And it will of course contribute as a great foundation for all the usual arguments – better visibility, more citations, more use, good for marketing etc. For the foreseeable future there is no magic solution but supplying good tools and arguments for the Open Access cause – Keep on convincing by example until the majority of research documents are available for free!

For us the bottom up strategy has worked fairly well. I guess it is better suited for smaller and tighter organisations where the channels of decision making are shorter and where personal contact with researchers is possible. To be able to showcase an idea that works OK from the beginning using ideas that have been supplied as feedback from users and providers is an accessible way but can only work if you are sensible to requirements from both researchers and administrative users and build enough carrots into the system.

Top Down is an approach that, I suppose, would be more attractive for bigger organisations but only as a platform for a Bottom Up way of building and marketing the end product.

[1] BTH forskningsdatabas. <http://www.bth.se/fou>

[2] Open Archive Initiative Protocol for Metadata Harvesting. <http://www.openarchives.org/OAI/openarchivesprotocol.html>

[3] OAISTER. <http://oaister.umdl.umich.edu/o/oaister/>

[4] Google Scholar. <http://scholar.google.se/>

[5] Journal Policies - Self-Archiving Policy By Journal. <http://romeo.eprints.org/>

[6] Berlin Declaration. <http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>

[7] Access to research results from Lund University, Sweden. http://www.lub.lu.se/sciecom/oapolicy_lu.pdf

Svensk sammanfattning

Det är relativt lätt att bygga och strukturera ett digitalt arkiv för

vetenskapliga fulltextdokument. Svårigheten ligger i att fylla det med tillräckligt innehåll så att det får ett liv och en dignitet som gör det till en självklar källa för användare. Vid Blekinge Tekniska Högskolas (BTH) bibliotek, har vi nästan tio års erfarenhet av att vad som på engelska oftast benämns "Institutional repositories". Trots ett relativt framgångsrikt arbete att utan dekret från högskolestyrelse eller fakultetsnämnd få BTHs forskare att frivilligt lägga in sina dokument i vår forskningsdatabas hoppas vi nu på ett beslut från högskolestyrelsen. Vi tror att om man antar vårt förslag till policydokument som bl a säger att forskningsdokument producerade vid BTH alltid ska deponeras i en elektronisk kopia i vår forskningsdatabas och att fri tillgång till dokumentet ges via databasen då upphovsrättsliga eller sekretessbestämmelser inte ställer hinder i vägen. Då kommer vår forskningsdatabas att nå den kritiska massa som är så viktig både vad gäller innehåll såväl som status för att kunna överleva.