

Implementing portal functionality at Wageningen UR Library: combining the old with the new.

Wouter Gerritsma¹, Marc E. Loman^{1,2}

¹Information Specialist, Wageningen UR Library

²Application Developer, Wageningen UR Library

Wageningen UR Library, Wageningen University & Research Centre, PO Box 9100, 6700 HA Wageningen, The Netherlands

Summary

Library Wageningen UR is a relatively small, but highly specialized academic library serving a population of about 5900 researchers and 4700 students in the life sciences. To better serve the needs of our users portal functionality has been introduced gradually to our Desktop Library.

A beginning was made with the implementation of portal functionality with the development of subject oriented portal pages, where patrons will find a selection of bibliographies, core journals, reference works and selected websites. There was a need for these pages, since the list of 'shortcuts', was found to be too overwhelming for newcomers. However a guided selection system for the library resources failed to meet the requirements of these newcomers to help them with the selection of the right library resources to start their queries. These subject-oriented pages are XML pages generated by queries on our library catalogue. At this moment there are about 110 different subject oriented portal pages. In discussion with our customers the usefulness of these pages has always been stressed, especially for newcomers to the various specialities, but not for the researchers themselves

Our second approach to the implementation of portal functionality was the possibility of personalization of library functions. 'My library'. Personalization means in our case: selection of favourite bibliographies and databases; a virtual lending desk (services of renewals and tracking of reservations); alerts on new additions to the library catalogue and in house created bibliographies; Table of Content alerts for the majority of our journals; SDI alerts for end users on our Ovid/Silverplatter databases; and last but not least, in of May 2003 we introduced world wide access for our patrons to our collection of 4000 electronic journal and databases through EZproxy. This was a long anticipated advancement of the personalization functionality since Library Wageningen UR has a highly mobile internationally oriented client base. Currently about a third of our clientele has subscribed to the various 'My library' functionalities.

To date we have not introduced 'one search' functionalities as they have become the fashion in library portals. Currently a team is working at the implementation of Metalib with SFX. This software will be integrated in the subject oriented portal pages. It is further envisioned that patrons, will be able to construct their own starting page where the customer oriented 'myLibrary' functionality will allow users to construct 'myPortal'. In that case they can selected their favourite journals, reference works, websites etc... The backbone of all these functionalities is our library catalogue build on a Minisis system with custom build web interface based on open URL.

Keywords: *Library portals; myLibrary; Ease of access, Personalization, Innovation adoption*

Introduction

Wageningen UR Library is a relatively small, but highly specialized academic library in the life sciences sector, serving a population of about 5900 researchers and 4700 students. To better satisfy the needs of our patrons, portal functionality has been included gradually into our library systems. In this paper we set forward how the Desktop Library of Wageningen UR has evolved with the inclusion of portal functionality. The adoption of these features by our clientele and the ways in which we envisage further improvements to our library system will also be discussed.

Since the late nineties, portals have become a hot topic in the academic library world (Dolphin *et al.* 2002, Calhoun, 2002). The reasons for adopting portal strategies have been varied. Web developments such as myYahoo, myCNN or myAmazon, where personalization and customization are the common standard and increased technological possibilities are important drivers of these trends. Academic libraries have been losing out to internet search engines such as Google, Scirus or Alltheweb. For both students and researchers, first inquiries for information are made using internet search engines rather than using any of the library systems. Libraries are therefore forced to improve their web presence and functionality. Improving library awareness is an important aspect for the various portal strategies.

In the library and information science literature, there is no agreement on what exactly entails a library portal. Definitions of library portals are hard to find, and even when definitions are clearly stated, the meaning changes over time. Instead of providing a definition, it is useful to look at the features that function in library portals (Straus, 2000; Butters, 2003). In this paper, we will illustrate how some of the library portal functionalities have been implemented in our Desktop Library system.

In 2001, a project for the third major revision of our Desktop Library was started. The aim was to improve access to the many electronic resources without neglecting the trusted paper ones. The project focussed on three major aspects that are important aspects of library portals:

- Ease of access
- Personalization
- Improved (electronic) services

What these items entail and how we approached these items will be discussed in the next sections. We will conclude our presentation with our vision regarding the direction in which our Desktop Library will further evolve.

Ease of access

An important feature of portal functionality is the ease of access to the rich resources through a single platform (White, 2002). White stresses the technological aspects that are both hardware and software related. Since the second half of the nineties Wageningen UR Library has been active in bringing access to as many library resources as possible to the user through the World Wide Web. Our computer department has installed and maintains a configuration similar to that sketched by White. The first steps were taken around 1995 to bring the OPAC to the web, making use of an in-house developed and maintained web interface that was based on open URL. Since then, various systems based on all kinds of technologies have become available through our Desktop Library. Despite the fact that many different systems are in use, our Desktop Library has successfully established itself as the single platform to all library functions for our end users. Apart from the technology that is required to evolve our Desktop Library, 'ease of access' is also influenced by the presentation of library resources on this single platform. In the Desktop Library, a myriad of

resources is still available and so the user can still find it difficult to select the right resource to start his information discovery.

During the last major change of the library website from the 'Virtual Library' to the 'Desktop Library' in April 1999, an important decision was taken to include all electronic resources in the library catalogue. This meant that a whole range of manually maintained web pages were discontinued and that many web resources were entered in our catalogue. This reduced the complexity of the Desktop Library considerably. At the beginning this led to many cataloguing problems, but over the years the members of our cataloguing department have become experts at describing the most exotic web-resources. Another strong advantage of a catalogue with both electronic as well as paper resources is material that is available on paper as well as on the World Wide Web can be linked to the library catalogue next to the holdings of the physical items. Meanwhile the number of electronic resources in our catalogue has grown from about 4200 items in December 2000 to nearly 13500 at the end of August 2003. In the beginning, the majority of our web resources were electronic journals. Currently nearly half of the catalogue links relate to books and reports that are available on the World Wide Web, as well as nearly 4000 journals. The rest includes websites, databases, dissertations, *et cetera*.

The vision underlying the decision to include electronic resources in our catalogue is that the library catalogue should become a major and trusted source for information discovery, irrespective of the form of the publication, paper or electronic. In our opinion, the library catalogue has a niche as the most important starting point for information discovery in a unique collection of sources without neglecting the trusted paper collection. The combination of paper and electronic resources in a single catalogue has made access easier, since the user does not have to search separate collections.

Over the years, the Desktop Library has become a more complicated starting point for the inexperienced and novice user, despite the fact that the web has become the single interface to all library resources. There has always been a system available on the Desktop Library for guiding our users to the right resources to start their quest for information. Log analysis however showed that the library guide section was an under-utilized feature. We realized that there was a need for 'starting pages', subject gateways or portals to quality selected resources on quite a number of subjects. We therefore started a project for subject portals, or portals as they were dubbed. The target groups of the portals are: novice users (students), inexperienced users, or more experienced users who want to have a look at the important sources of an unfamiliar subject area. With the character of science becoming more interdisciplinary, this was envisaged as an important target group as well.

In our portals, we make selections of the major bibliographies, core journals, professional journals, reference works, textbooks and selected websites. Apart from these featured items, a full set of results from the library catalogue on the relevant subject can also be obtained. Since the number of subject portals becomes quite large quickly, a uniform approach to the design of the portal pages was necessary. Of major importance is the fact that these subject oriented pages are generated by very simple queries on our existing library catalogue. Information Specialists choose the (electronic) information sources they think are relevant to a certain portal page and tick it in the catalogue record. A query renders an XML page that is then formatted, styled and sorted using XSL Transformations (style sheet) on a Linux server. Thus, an HTML page with sorted lists of hyperlinks to relevant information sources is presented to the end user on the fly. In this way uniform pages are created. The backbone of the portal pages is our library catalogue.

Although we dubbed our starting pages or subject gateways 'portals', the discussion on academic library portals and portal functionality deals with more functionalities rather than ease of access only. Important aspects of portal functionality of library websites is also personalization of library functions, sometimes described under the term myLibrary, and

improved (electronic) services. In the next section we describe the personalization features that have been implemented in our Desktop Library.

Personalization

In many contributions to the discussion on library portals, personalization is one of the aspects that has received much attention. However personalization of the web environment can be achieved in a variety of ways. In some occasions it is possible to customize parts of the web environment, whereas on other websites it goes far beyond the superficial adaptation of the web look and feel. Specifically tailored services are sometimes provided.

Before personalization of the library web functions can take place, the users needs to be authenticated. User authentication is a discipline of research by itself. In the Netherlands we don't have a body such as Janet in the UK, and within our organization the library is one of the frontrunners of website development. Authentication had become a real problem for the implementation of portal functionality, which had to be solved before really important personalization of services could be offered. At first the authority list of the organizations e-mail system was not sufficiently secure to be used for authentication. Thanks to a complete overhaul of the Wageningen UR network -still in progress- these problems have been solved. We now know for sure, who is a member of our organization and who isn't. The implementation of different functions of personalization has therefore been gradually implemented over the last year.

Personalization for patrons who are member of the organization, i.e. researchers and students, is more comprehensive than the personalization functions than are allowed to patrons from outside our organization. The personalization features of the Desktop Library have been dubbed 'myLibrary' and the following functions are possible:

1. Customization of the Shortcut section of the Desktop Library
2. Alerts on new additions to the Wageningen catalogue
3. Alerts on new additions to in house developed databases/bibliographies
4. Journal TOC alerts
5. SDI on Ovid databases
6. Off-campus access to electronic resources

Items 1 to 3 are available to anybody; items 4 to 6 are available only to authorized patrons of Wageningen UR.

In our desktop library it has always been possible for the (experienced) user to select a resource from an alphabetically arranged list of shortcuts to various resources. We experienced two problems with the shortcuts list. Firstly, the list became very long. Secondly, most novice users only used the shortcut list, without realizing what kind of resources they actually selected. The possibility of customizing this shortcut list is an important function for our users.

Apart from the catalogue, our library is also involved in the publication of a number of specialized bibliographies. Since the personalization features have been introduced, it has become possible to receive alerts on new items added to the catalogue and the in-house created databases that meet the search criteria of the user. The search strategy is added to the users profile. On a weekly or monthly basis, the subscribers are notified about new additions meeting the user's criteria. For the library, this feature has the consequence that we have to process our new additions more quickly so that they can be retrieved by the SDIs that are run by our patrons.

A new function available with personalization is the possibility of receiving journal table of content (TOC) alerts through the library. To make this possible, we have an arrangement with Swets from whom we receive journal TOCs for roughly 5000 journals. The advantage for our patrons is that whoever the publisher is, they can register for most journals in a single place, using a uniform interface. This feature is getting more popular slowly but steadily, since a large group of users received TOC alerts already from the various publishers. There is a slight delay between a TOC alert from the library or directly from a publisher, but our convincing argument is that our clients don't have to shop along all publisher's sites to subscribe to their favourite journals. Most users are not even aware of the journal publisher.

At the beginning of this year, we have introduced the SDI feature on our databases run on the Ovid/Silverplatter (Electronic Reference Library) ERL databases for our end-users. This was only possible after we upgraded from Webspurs 4 to version 5 at the end of 2002. The introduction of this feature was accompanied by special instruction sessions. As a library, we think this is an important tool for our users to stay abreast of the developments in their field.

In June 2003 we added the last personalization function: off-campus access to the restricted electronic resources, both bibliographies and journals. For this function, use is made of EZproxy software. Off-campus access was a long anticipated functionality by our patrons that had been delayed by the authentication procedure which proved difficult to establish.

Although we, as a library, are quite pleased with the personalization features added to the Desktop Library, the important question is: are they being used by our patrons? Some of the usage statistics are presented in Table 1.

Table 1, Number of users of various 'myLibrary' functions at the end of August 2003.

Function	Users
Total myLibrary accounts	3283
Users with customized shortcuts	1012
Users with alerts on catalogue and in-house maintained databases	221
Users with SDI on Ovid databases	100
Users with TOC alerts	589
Users of Off campus access	420

It is encouraging that nearly a third of our potential users have established a myLibrary account. Considerably higher than the 10% adoption of registered myLibrary users reported by Gibbons (2003). The popularity of the customization feature in the Desktop Library is interesting. This personalization function has been available for slightly less than a year now. Alerts on the catalogue and in-house maintained databases (which have become available only recently) has not attained a satisfactory level yet. The number of users of SDI alerts is low. However it is interesting to note that on average they maintain 9 different profiles. To explain this low usage, it has to be pointed out that this is the most difficult function to install properly for the end-user. It means that this feature should receive more attention in library instructions. The number of subscribers to the journal TOC alerts is encouraging. We face competition from the various publishers offering a similar functionality from their websites, and as a library we have to attract the most avid information users to our system. Our anticipation that off campus access would be a major attraction for the myLibrary functionalities appears to have become true. This feature is only available since the beginning of June 2003 (the holiday season just started), but we already have 420 single users establishing 2462 sessions. Off campus access was the most anticipated personalization feature by our patrons. Off campus access serves three groups of users: 1) employees and students with ADSL accounts, 2) graduate students from overseas and 3) staff on sabbatical leave. It is expected that from now on, since the most important personalization functions are in place, usage will increase.

Improved (electronic) services

Perhaps the most important personalization feature is that we started to collect all e-mail addresses of our patrons. And that in itself proved an arduous task. Where users used to get warnings in the mail that items on loan were overdue, they now receive an e-mail message with the possibility to extend the lending period. It is also possible to make reservations using your myLibrary account. The tracking of lending and reservations has been dubbed the 'virtual lending desk'. This functionality is in fact a library pushed resource, where we are dealing with a mixed bag of registered users as well as users from whom we have collected e-mail addresses. The option of extending lending periods electronically has been a widely used feature. The number of lending extensions has been set to a maximum limit, so eventually borrowed items return to the library.

Another service that has been added to the catalogue records is a function to perform a search with the keywords from that catalogue item in Google or in the Library catalogue to find related material "More like this".

The evolving Desktop Library, where do we go?

At this moment our portal pages are still a form of pushed information. In constructing the portal pages we consult the departments for which they are designed, but in the end it is the library who selects the items for the portals. In the short term, we are implementing a system where the patrons can select any catalogue item for their own portal: myPortal. At this moment the users can only select their own shortcuts, but this will be extended to journals, books, websites or any item in the catalogue. The technique that will be used for 'myPortal' is similar to that described for current portal pages making use of XML and XSLT. When this has been realized we will be in a situation of information pull by our patrons.

What hasn't been covered in this article yet is one-stop searching. In many articles on library portals, the focus is only on the implementation of Metalib, Zportal or Encompass software to allow users to search across all databases. As of September 2003, a team is working on the implementation of Metalib and SFX software in our Desktop Library. In our strategy, the implementation of Metalib will be in the portal pages. In each portal page, the bibliographies relevant to that subject will be ticked automatically, and subsequently the user can query these sources in one search. It will be up to the patrons to select other sources (or deselect the suggested ones), but in the first instance, relevant sources for that subject are suggested by the library so that the user is given a helping hand in the beginning.

An important effect of the implementation of personalization functions and creation of portal pages is that we have become more active in consulting our patrons. We either asked them for input, or gave instructions when bringing the new features into operation. The increased library awareness is difficult to measure, but it is a very positive side effect of improving our web presence.

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