Open Medical Library : Cooperation and Scientific Communication Network through RSS

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Abstract

One of the fastest and most performing tools on Web 2.0 is RSS (Really Simple Syndication). It allows the access to digital content without constantly visiting the pages where it is stored. Syndication enables to share all kind of information in XML format, and offers us the opportunity of showing our own content in other web pages in an integrated way, giving an added value to the information. In this communication we would like to present a Network Collaborative Project between medical libraries belonging to different institutions, located in different geographical areas and with different purposes, objectives and interests (some of them focusing on research and teaching and other on medical practice).
Our medical libraries have incorporated "the content syndication", on the one hand, as another tool for medical librarian work and, on the other hand, as a value-added service in order to be useful to different users such as medical staff, teachers, researchers or students. RSS lets us share information channels, creating a space for collaborative research. Syndication is a great help to our users as it develops a new trend in the content management sector, which is changing considerably the relationship with information, for both users and librarians' point of view.

Introduction

Our Project is a joint initiative undertaken by a group of information management professionals working in different organizations in the medical field: libraries and documentation centres in Higher Education institutions (Universidad de Salamanca, Universitat Autònoma de Barcelona, Documentation Centre at the Instituto de Psicología Aplicada, Lisbon) and hospital-based libraries (Hospital de Torrevieja). Ours is a heterogeneous, geographically scattered group with different working languages (Catalan, Spanish, and Portuguese). Our institutions are based in two different countries (Spain and Portugal), and those located in the same country (namely, Spain) are considerably distant (Salamanca, Barcelona, Torrevieja).

From time immemorial, collaborative work among professionals working in the same field has been a reality. Traditionally, interpersonal relations with the various types of professionals working in a sector have been an important part of one's work, for instance as regards sharing information, collaborating, establishing alliances, creating lobbies, etc. In recent times, the situation has not changed considerably. Interpersonal relations with colleagues are still an important part of one's job. Nevertheless, there *has* been an evident evolution in the ways these relations are established: ordinary post has been replaced by telephone conversations and, lately, by e-mail communications and the new services offered by the Internet. Undoubtedly, Internet has radically transformed the domain of personal and professional relations, to the extent that, according to experts, we are witnessing the explosion of a second generation of web development, i.e., Web 2.0 or participatory web. Some authors even talk about a third generation web. In any event, the importance of collaboration must be highlighted if libraries are to live up to their mission and goals, both in economic and strategic terms.

What are the advantages of Web 2.0 for our work? What tools and applications can be of help in order to keep the users well-informed? These questions were at the very basis of the constitution of our group. From the start, we perceived very clearly that the different tools available in Web 2.0 could be extraordinarily useful for our libraries and documentation centre. Web 2.0 was perceived as a real help, on the grounds that it could simplify our work. Almost effortlessly, users could be informed and constantly provided with updated information and the latest news, a fact which would surely be highly appreciated by those users. Diving in the world of Web 2.0 seemed, thus, worth the effort.

Among the multiple tools in Web 2.0, we selected RSS (Really Simple Syndication). Rather than providing a lengthy explanation about the nature and characteristics of RSS, we will concentrate on the reasons why RSS seemed adequate to our needs. In the first place, it is an easy-to-use and useful tool from the point of view of the users, who can "subscribe" to digital contents of their interest with no need to return to different webpages repeatedly in their search for new information. Second, it also grants the opportunity to share information channels and make information resources known in an integrated way. Furthermore, it facilitates the creation of virtual spaces of professional cooperation and collaborative work, and it fosters the development of new

projects regarding content management. This significantly transforms our relation to information, both in the case of librarians and users. For all these reasons, it has become a service with an added value for the students, teachers, doctors, clinicians and researchers at our institutions.

Taking into account its extraordinary potential, this tool may have considerable impact in the future development of our profession.

Background

At the date when our endeavour began, we had all heard about RSS and were familiar with the concept of content syndication. Nevertheless, its use was still scarce, even though it is one of the most useful and powerful tools now available. It has to do with blogs or weblogs, but it is still widely unknown among users, and even among a wide sector of professionals working in the field. Thanks to RSS technology, a file including the headlines and a summary of an entry published in a blog or in a digital periodical publication can be created. The above-mentioned file is a news channel to which one can subscribe by means of an "aggregator", either one installed in our computer or one of the many that are freely available in the Internet. The files are constantly updated: thanks to the "aggregator" we can check on the latest news that we have not read yet. It is a perfect solution to be up to date on all the latest news published on a particular subject: instead of browsing the enormous flow of information in the web, one merely selects the information which may be of interest in a simple and easy manner. Information comes to us, and not the other way round.

Even though a vast majority of our webpages allows users to subscribe by means of RSS, only the Torrevieja Hospital and the medical libraries at the University of Salamanca had included a service providing abstracts from more than 300 specialized journals in the field of medicine using RSS technology (fig. 1). The "aggregator" used for that purpose, one available on line, was *Bloglines* (http://www.bloglines.com). An on-line "aggregator", also called "feed reader", is an application for managing information sources and linking RSS channels from a number of websites (in this case, the websites where different medical journals are located). The content, always updated and organized in thematic files, allows users to check the latest abstracts published in their favourite journals.

Fig. 1: Page with journal abstracts of the Medical Libraries of the University of Salamanca.

Content syndication not only allows the user to receive updated information offered by others; it is also useful for displaying other content from the website of the library. In order to receive this information, users need to create their own feed including news on the topic that may be of their interest. Content syndication is, thus, a two-way circuit in which all participants have access and create information in an easy and fast way.

Our goal is to develop the so-called **Open Medical Library,** a flexible, adaptive project, promoted by the community of participants, with the ultimate aim of supporting higher education, research and clinical practice or care, as well as of serving as a tool for the professionals working at the libraries. The framework of the **Open Medical Library** will provide information on new acquisitions, management and communication services and on useful resources for research and teaching.

The service platform **Open Medical Library** will integrate different learning contexts; it will be able to adapt to new developments in research, teaching and practice, thus offering new services to students, teachers, researchers and

clinicians and providing a professional work tool for professional collaborative work. The goal is to provide quality services at low cost or no cost.

The nature of information is changing. The dissemination of information is at a crossroads, between traditional models and channels and new ways and environments that foster the exchange of information. The roles of teachers and students are also changing and are being directed towards greater participation and collaboration in new teaching and learning environments. Libraries should participate actively in this process of change, enhancing the value of the services available for the transfer and communication of information. To achieve their objectives, the libraries have to be flexible, adaptable and efficient as regards meeting the needs of users, irrespective of the place where they are located.

Description

The main objective of **Open Medical Library** is to create new on-line library services within the field of health and medical sciences thanks to the application of new information technologies and the use of Web 2.0 tools in general and RSS content syndication in particular. This project, which arises, as already indicated, at the initiative of a group of librarians and information management professionals, includes the creation of a virtual platform which will incorporate the resources, activities, training, discussion forums, etc. of the participant institutions with the ultimate goal of creating a new generation of collaborative and participatory library services. The first step in this process has been to build an appropriate framework, by establishing a social community that allows us to develop a virtual environment. The conclusion is that syndication contend could help us and bring many advantages, not only for improved our services to our users, but also in as much as it was useful for us as librarians, led us to make decision to start a project together. This project will both help us in our daily tasks and provide the user with relevant, updated information. For that purpose, the following goals were established:

- To create a virtual, space, both private and for common use, and multilingual in its nature (Portuguese, Spanish, Catalan and English). This virtual space will allow us to work cooperatively by sharing our knowledge and resources to create new materials and services for users. In that space, we will share comments, posts, professional news, links to health resources of interest, information of professional interest, links to the blogs of other medical libraries, etc.

- To develop a public virtual space with information that may be of interest to students, teachers, doctors, librarians, etc. It may contain:

  - News about new tools
  - Alerts, both from free digital resources and from those subscribed to by each institution.
  - Online Reference

- Latest bibliographical references, film forum (for example, on topics such as cinema and medicine ...)
- Social Networks (Facebook, Twitter ...)
- Advertising and marketing through the libraries' blogs, social networks, and via RSS.
- Podcast.
- Photographs.

- To provide support for teaching:

  - To keep teachers informed about the latest publications.
  - To provide teachers with easy access to many educational blogs in their area.
  - To facilitate channels for sharing information with other teachers.

- To become a reference for students:

  - To create a collaborative space between students.
  - To share information through blogs and social networks.

Findings

Once the objectives were clear, we had to find adequate software for our project: a virtual common workplace. As some managers allow mail to subscribe to an RSS feed, such as Google, we tried it. The result, though good, did not live up to our expectations. A possibility was to use of *Refworks Refshare*. However, as only the universities of Salamanca and Autònoma of Barcelona had *Refworks* subscription, this possibility was dismissed. At the end, we selected *Netvibes*. Here are the reasons why. In the first place, creating an account is very easy and it can be accessed from any computer; secondly, it allowed us to create a virtual space of common work and at the same time a common public space with information; thirdly, of course, it allowed us to add RSS feeds and to rank them according to subject matter through tabs. To query and monitor content is thus very easy.

The common virtual work space should, in our opinion, have the following characteristics:

Flexibility: in the form of a services platform including a wide range of resources and providing structures able to incorporate new types of resources, new users and new contexts.

Virtual community: by designing and building a social network working for the library community, based on the use of open source tools from the Web 2.0.

Efficiency: offering a modular application that may be integrated with other

existing structures, both academic and in the field of research, in order to improve the effectiveness and efficiency of the institution.

Functional area of the Open Medical Library

To achieve the goals and mission of the project a platform was developed for this purpose. The platform chosen was *Netvibes*.

With *Netvibes,* all applications of Web 2.0 can be incorporated in just one page, like in a personal virtual desktop. It is a website where you can easily integrate different applications or gadgets, such as notes, calendar, address book, etc., which makes it more attractive as well as practical. In any case with *Netvibes* we can syndicate content and widgets (or gadgets) in one page and thus facilitate users in their search for relevant information.

In this regard, we have created two platforms, a possibility offered by *Netvibes*. The first serves as a common virtual working space. It is a custom page, and tailored to our interests (fig.2). Each of the participating institutions shares, suggests, comments on, and adds relevant information, especially news from the sectors of the health and medical sciences that may be of common interest. It's like our group's intranet.
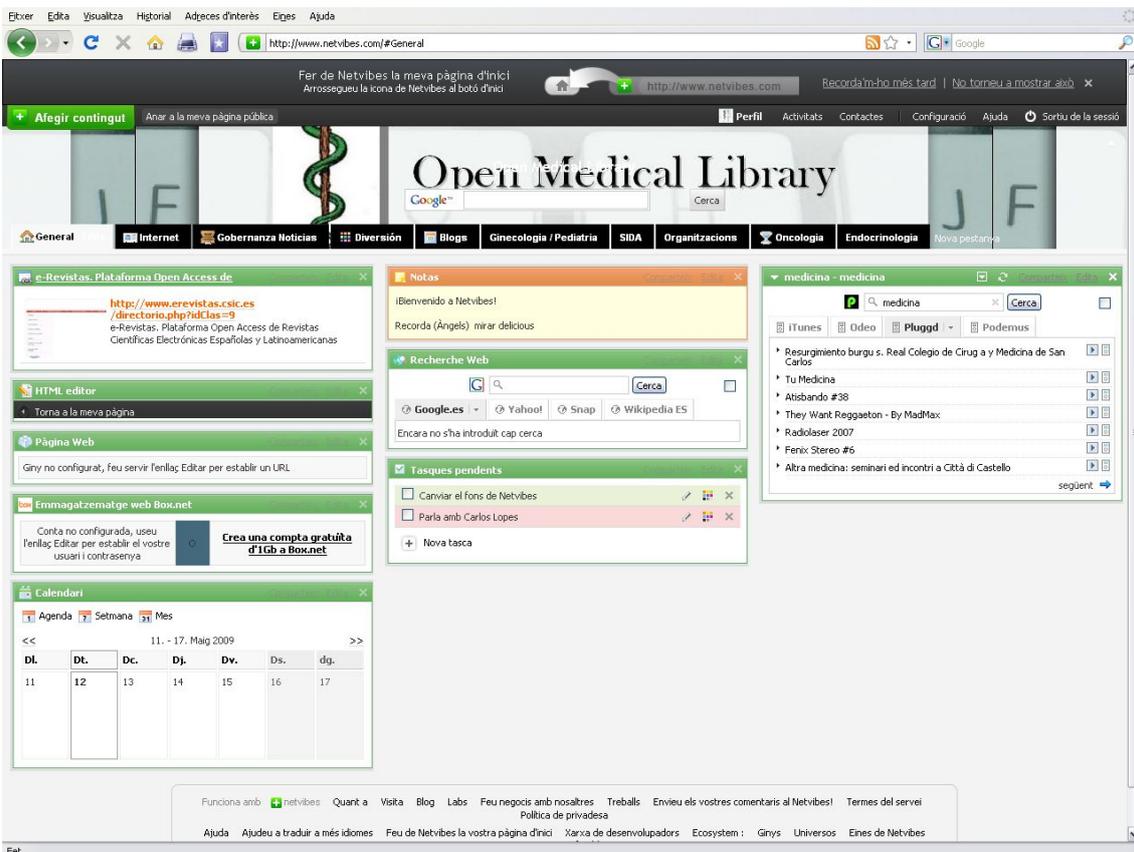

Fig 2: 2: Home platform group.

In any event, the most interesting application from the user's point of view is the public platform, which is actually a web portal (fig. 3). The page is divided into

tabs. Each tab is a syndicated content aggregator with different applications. *Netvibes* may contain various services, multi search engine, photos, videos, podcasts, access to blogs, etc. All the tools of Web 2.0 are accessible to the user. For example, if the user has an account in *Delicius*, s/he can post his or her new bookmarks directly into that account through Netvibes. Discussions on specific topics can be followed by adding Twitter Search widget and blogs; news or links can be shared through *Facebook* or *Twitter.*
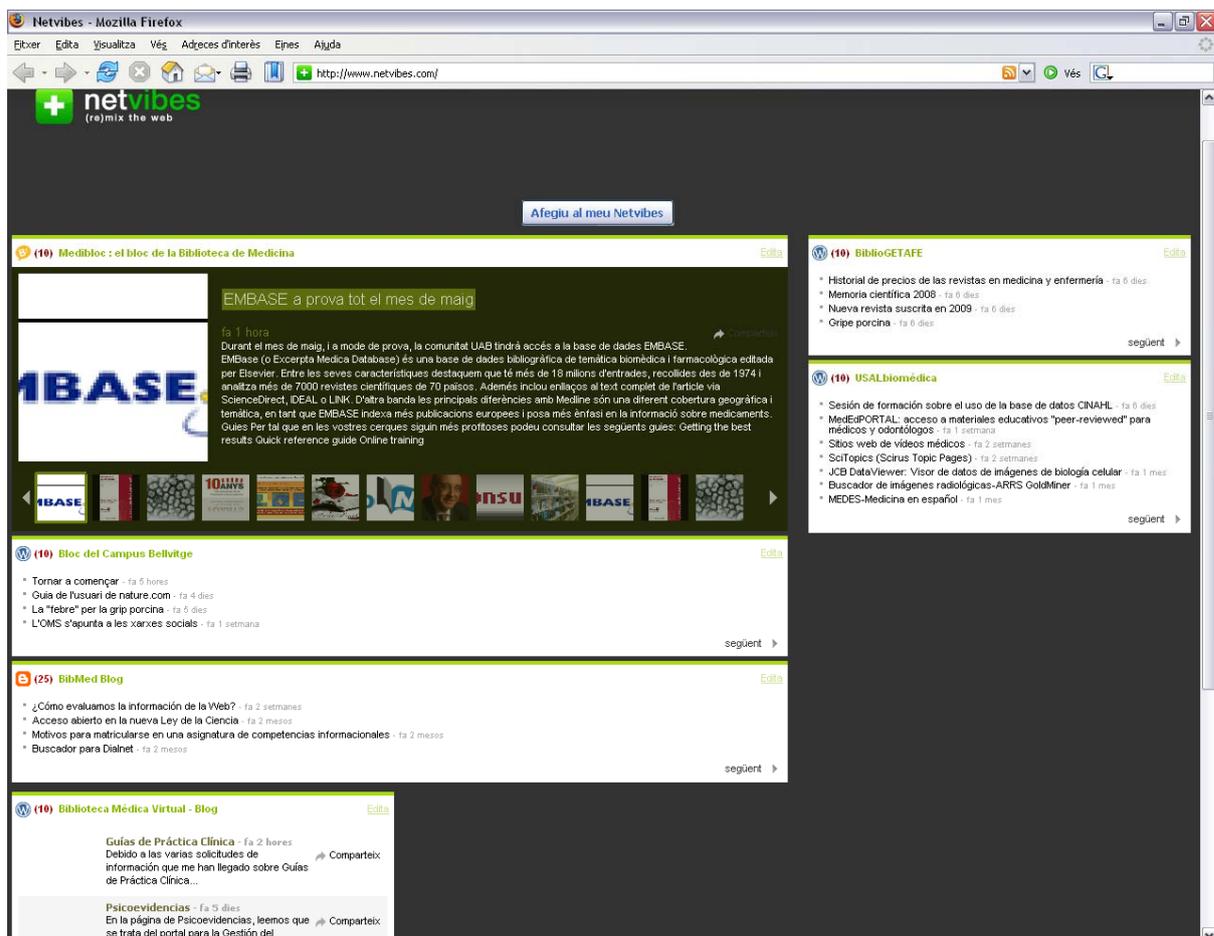

Fig.3: Homepage of the public platform for users

Conclusions

At the moment our project is still in an initial stage: we are still in the process of establishing which aspects are most useful and what we need to be up to date and to respond to our users. Some institutions have not implemented the project yet. Others like the Library of the Torrevieja Hospital and the Bio-sanitary Libraries of the University of Salamanca and have had their first experiences with users, which are very satisfactory. In view of the fact that many users were not very familiar with the new tools offered by Web 2.0, the library of the Torrevieja Hospital began to organize short talks to explain the usefulness of applications like RSS and email alerts as applied to clinical practice. A significant increase in the use of the services created with RSS (for instance, abstracts from periodical journals) followed suit. This had also an impact on the increased use of other library services not directly related to web 2.0, for example an increase in the number of research articles requested from

the libraries. In order to know whether the number of visits to our blog had increased after the implementation of content syndication, we used an application called FeedBurner, which provides data regarding syndication, that is to say, the number of users visiting the blog from their RSS reader. Furthermore, in order to promote direct visits, we opted to send excerpts to RSS, instead of the full post.

In the light of the satisfactory results achieved with the implementation of content syndication (journal abstracts through RSS) by the Bio-sanitary Libraries of the University of Salamanca and the Library in the Torrevieja Hospital, it is our contention that the implementation of this new service will be very well received by all our users. This is currently an ongoing project. We are shaping and customizing the page with which we work, we are assessing what utilities can be useful, what information could be shared and what information is really relevant for the users. From now on, we will have to outline the public page for end-users. Once we have the platforms, both the one for internal use and the public one at the service of users, each of the participating institutions will assess, through pilot tests with real users, its potential impact and acceptance on that large and heterogeneous group named "users". If, confirming our expectations, the results of those tests are successful; undoubtedly, this new platform should be launched and marketed through an advertising policy that may really help its spread.

References

Ayuso García D, Martínez Navarro V. La recuperación de la ciencia en internet. Información digital y conocimiento científico. Boletín de la ANABAD 2004; 54 (3)

Caminos Marcet J.M, Marín Murillo F, Armentia Vizuete JI. Novedades en el diseño de la prensa digital espańola (2000-2008). Palabra Clave 2008; 11 (2)

Chu SKW, Law N. The Development of information search expertise of research students. Journal of Librarianship and Information Science. 2008; (40)

Franganillo J, Catalán, MA, Bitácoras y sindicación de contenidos: dos herramientas para difundir información. BiD: textos universitaris de biblioteconomia i documentació. 2005; (15).

Lee, MJW, Miller Ch, Newnham, L. Podcasting syndication services and university students: Why don't they subscribe?. The Internet & Higher Education. 2009; 12 (1).

Muñoz Carril P, Implementación del formato RSS (Rich Site Summary) en procesos de gestión y comunicación electrónica en instituciones educativas, públicas y empresariales. Pixel-Bit: Revista de medios y educación. 2008; (31)

Xiao N, Web 2.0 as Catalyst: Virtually Reaching Out to Users and Connecting Them to Library Resources and Services. Issues in Science and Technology Librarianship. 2008; (55).