Abstract

Nowadays, information centers and libraries around the world are supposed to provide external information for their users in a speedy way, ideally 24/7. How can this be handled in a global pharmaceutical company with a variety of electronic and physical information resources? How can the needs of heterogeneous local and global user groups be met?

The Novartis Knowledge Center has introduced a copyright compliant portal solution which tries to satisfy both, local and global needs. Users are recognized according to their site of employment automatically and only see licensed content they are authorized to access.

The portal offers different e-services like e-journals, e-books, databases and pharma industry news which are either available for all users around the world or only for a specific site or a restricted user group. An integrated global document delivery solution is available whenever a literature request cannot be satisfied from licensed content. Moreover users can easily access global and local news from the Knowledge Centers and participate in different e-resources trials.

To complete the picture the portal offers several local services, like contact information and opening hours, an online catalog (reflecting the physical holdings), a new books list, an expert search request form and information on forthcoming training events.
Overview Novartis

Novartis was formed out of three large pharmaceutical companies: the history of Novartis actually dates back to the middle of the 18th century when Geigy was founded, followed by Ciba, founded around 1860 and Sandoz which was formed in 1886. In 1970 Ciba and Geigy merged to Ciby-Geigy Ltd. which finally, with the merger with Sandoz formed Novartis. This merger took place in 1996 and was one of the largest mergers of pharmaceutical companies in history.

The headquarters of Novartis are currently located in Basel, subsidiaries and sites are spread all over the world. Novartis has more than 100,000 employees in over 140 countries.

The Novartis Knowledge Center (NKC) employs 44 persons, who are located on six different sites. These are Basel (CH), Vienna (AT), Horsham (UK), East Hanover, Cambridge and Emeryville (last three all USA). All six Knowledge Centers work closely together and contribute to global objectives. There are approximately 50,000 potential users in over 50 countries who use the offered products and services.

The Novartis Knowledge Center (NKC) Portal

The mission of the NKC is to meet the needs of its heterogeneous user groups. Novartis employees need to be provided with copyright compliant access to published scientific, technical, medical (STM) or business news or information, either online or in the physical libraries.

One huge step toward this approach is the NKC Portal, which has been developed inhouse by NKC staff. This copyright compliant portal solution tries to satisfy both, local and global user needs.

Technical background

The portal is built in BEA Weblogic and comprises of the following:

- 9 external databases and service providers
- 8 independent application services
- 1 internal Oracle database
- 1 Apache web server
- 1 Weblogic Portal server
- 1 Weblogic Application server

The portal offers automatic authentification and authorization. This means that users are recognized according to their site of employment (= authentification) and can only see content they are authorized to see (=authorization). The system knows what every single user is allowed to see - independently from where a user logs on to the system, he/she can only see content according to his/her site of employment.

The portal’s user interface

The portal is divided into three main sections.
- Information on the Knowledge Center itself
- E-contents
- Local library services

Additionally there are Quick links to important services displayed in small portlet boxes. Their contents depend on the contents displayed in the main window. Help pages are accessible from everywhere in the portal via Quick links.

**What’s new**

In the section ‘Information on the Knowledge Center’ the “What’s new” page has to be highlighted. Whenever a user enters the portal (site independent), the “What’s new” page opens. Here all current Knowledge Center news, like information on new licensed materials, trials or service outages, are listed. Additionally to globally interesting news, local Knowledge Center staff can add news, which can only be seen by local users. This can be information on local activities or services like trainings, open days, new local licenses etc. “Expired” news are archived on the portal and can be accessed at any time.

**E-content**

Providing E-content is NKC’s core business (like for almost any modern library or information center nowadays). The NKC Portal gives access to a wealth of e-resources. Currently NKC offers approximately 2400 licensed e-journals, 130 databases and 120 e-books and Reference works, which are globally available for all Novartis users. Furthermore there is also local e-content, which of course can only be seen and accessed by authorized users. These resources are explicitly marked with a “local license” logo and are either controlled by IP access or username & password. Within the e-content users can search/browse by title, subject or keyword. The e-journals page also offers a subscription feature for a monthly newsletter that contains all important updates on e-journals.

On the databases page the user finds exact information database coverage and registration/access policies, which is displayed in a separate pop-up window for each database.

Within the e-contents there are two notable personalization functions: The “My favorite…” and “My recently used…” function. The “My favorite…” function allows users to save their frequently used e-journals, databases or e-books as sort of bookmarks to their personalized portal page. Whenever accessing the portal afterwards, the bookmarks appear in a convenient quick box and allow the user to access the content much faster than in the regular way.

The “My recently used…” function saves the links to the last accessed resources. With both functions, the user can decide on the appearance of the personalized content, e.g. number of links displayed.

According to the automatic authentication and authorization described before, there is no need for any NKC Portal users to log on in order to get to their personalized pages.
Local library services
As mentioned earlier, the portal offers several features to support locally provided services. These contain an online catalog, information on upcoming trainings, an expert search request form, a document delivery tool, the possibility to order physical material online and of course general information on the library like opening hours and contact information. The online catalog allows users to search the local (and global) physical holdings, obtain information about the availability of the requested resources and finally find out where they can be found in the physical library. The section “Learning & Training” provides users with specific information on trainings either run by a local NKC staff member or by external trainers. One can easily see where/when a specific training takes part, what the topic is and where to register. The Knowledge Center also offers its users Expert Searches. Therefore an expert search request form is provided. This form allows the user to send a search request directly to the responsible Knowledge Center search expert. The only thing to be done is to fill in the form with minimal information on the search criteria and then simply send it. Via SFX and an internal document delivery tool the users can order books, journals and of course articles directly from the portal. This integrated copyright compliant document delivery solution allows users to place requests whenever an article, book, journal etc. is not found within the licensed material or for any reason cannot be accessed. Journal articles or book chapters can also be ordered directly from the database the user is currently searching via SFX linking. If available, the system automatically gives access to the full text. Otherwise the the request is sent to the document delivery system instead. In the document delivery tool the holdings of all Knowledge Centers are integrated, so the use of our global library holdings is optimized. Additionally to these local services, the pages also provide information on copyright and on the local Knowledge Center itself. The users can easily find out responsible contacts for all offered services, contact details and the service hours of NKC staff.

Conclusion
It is of course very hard or even impossible to satisfy all individual user needs. However, with the introduction of the NKC Portal the Novartis Knowledge Center has made a major step toward the right direction in providing business relevant information resources in a convenient and timely manner. The portal is enhanced every day in order to include further services and to increase user satisfaction.