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OPAC 2.0: Opportunities, development and analysis.

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Abstract

Web 2.0 has raised new expectations from the library users : after reading a book, they wish to rate it, provide some comments or review about it and tag it for themselves or for others. They also expect to discover other interesting books thanks to the contribution of other people.

Those functions, summarized under OPAC 2.0, are now provided by several Integrated Library Systems (ILS), at least partially. But, due to the slow development of some products, other paths were also explored: Content Management Systems (CMS) or specific software.

CMS does provide the required functionalities like tagging and commenting. Some pioneers thus decided to develop a new Web OPAC based on CMS. Another approach was to build an OPAC that is independent from any ILS and which offers the required functionalities.

In this paper, we propose to review the options available for the librarians wishing to offer Web 2.0 functionalities to their users. We also provide a synthesis of our own experience in implementing an OPAC 2.0 into our Library.

Introduction

OPAC's

The Open Public Access Catalogue (OPAC) presents the collection of a library to its users, usually through searching or browsing. It may be an extension of the Integrated Library Management System (ILS) or independent software (1-4).

First generation (1960s and 1970s) used pre-coordinated indexes; second generation (1980s) came with keyword and boolean searching(1). Since then, some improvement was made to enhance the search: partial-match techniques, correcting spelling errors, keyword suggestion "find similar", term weighting(1). At the end of the 1990's, the OPAC became available trough Internet, and several Integrated Library Systems are now fully Web-based (5, 6).

Other functionalities are offered through the OPAC. A personal account allows the user to access personal information, check current loans, make a reservation, create a personal query and receive an email alert (6). In the last three years, other functionalities related to Web 2.0 have been incorporated into the OPAC.

Web 2.0

The concept of Web 2.0 has been described by Tim O'Reilly. In place of a definition, he gave some examples illustrating the difference between Web 1.0 and Web 2.0 where surfer are also producers of content and may interact(7-9)

The concept of Web 2.0 is thus wide. Even the authors of this paper have quite different approaches of Web 2.0.

For the Knowledge Manager: "*Web 2.0 provides tools that help to explicit knowledge, share it and identify community of interest or experts*".

For the IT: "*The term 'Web 2.0' can be seen like a label placed on a whole of technologies and practices in the development of software. Thus, tags are added in quasi all web applications. Some of these practices, like API and mashups based on these API let us predict what could be the semantic Web*".

For the Social Scientist: "*Web 2.0 tools give the opportunity to anonymously, punctually and briefly share experiences, opinions and thoughts within an informal, unidentified and in(de)finite social network*".

Far from old fashioned library catalogues, Amazon(10) provides several tools that fit those definitions. Above the standard description of a book, Amazon let readers discuss the book in a dedicated forum, rate it and tag it. Surfers receive suggestions of books based on what book owners also bought or related items. Amazon also provides API letting other applications use its content, including users' content. Those functionalities helped Amazon to drain more customers than its competitors and to survive to the dot-com bubble (7).

More recently, some specialized Website like Librarything(11, 12) or Babelio(13) offer to users the possibility to describe books. The process is simple: the user creates a personal library, shares the review of his books and then discovers other books thanks to the other members of the community.

Tools like these have created new expectations from some librarians wishing to offer the best services to their users, starting a new trend called "Library 2.0" (14-16).

OPAC 2.0

Merging those participating functionalities into an OPAC produces a so called OPAC 2.0(17).

With an OPAC 2.0, library users may add comment or rating to records of books they have borrowed from the library. All this information may help another reader to know if the book they just identified will satisfy them.

Library users may also discover books of interest thanks to the functions "suggested reading" or « people who borrowed this book also borrowed... ».

Another possibility is to tag the record with their own keywords and thus enrich the catalogue with a Folksonomy that is closest to other users' vocabulary. Those tags ameliorate the search function and help users to identify books of interest.

Some ILS already possess some Web 2.0 functionalities, but, if not, there are other ways to get them: using a specific software or using a specifically adapted Content Management System (CMS) like Drupal, SPIP or WordPress(18-20).

Aim

In this paper, we plan to list OPAC 2.0 options available for the librarian.

We will also give some feedback about our project of implementing Web 2.0 functionalities into our OPAC and letting our users participate to the enrichment of their catalogue.

Methods

OPAC 2.0 functionalities

The functions we retained as 2.0 for an OPAC are those allowing the user to enrich the catalogue:

- Commenting: the possibility for a user to add a comment to the record of a book.
- Rating: the possibility for a user to add a rating usually represented by a maximum of 5 stars, to the record of a book.
- Tagging: the possibility for a user to add a tag, a free keyword, to the record of a book. All those free tags constitute a folksonomy, a taxonomy built by non professionals and that is not controlled.
- Book suggestion based on loans: when looking at a book's record, a user may get suggestions based on loans of users that have also borrowed the book currently seen.

Other functionalities, often called 'user centric', were not retained, even if sometimes presented as "2.0"(4):

- Application Program Interface (API): the possibility to query the catalogue from another application.
- Selected dissemination of information (SDI): the possibility for users to select a query and receive updates by email or RSS.
- Faceted search: the presentation of results allowing to easily narrow the search or discover other documents (serendipity).
- Spelling suggestions: getting word suggestions when typing a query.

- Book suggestion based on authorities: getting a list of book that share some characteristics (author, descriptor, etc.).

Identification of OPAC software

To identify OPAC software, we searched bibliographic databases (PubMed, LISTA) and the Web. We then consulted the website of ILS providers for products description or fact sheets.

The keywords used to identify OPAC 2.0 were: OPAC 2 ; Web 2 ; Web 2 AND ILS, name of OPAC 2.0 previously identified.

Testing OPAC 2.0 locally

The Belgian Health Care Knowledge Centre (KCE) is a semi-governmental agency dedicated to studies in the field of Good Clinical Practice (GCP), Health Technology Assessment (HTA), Health Services Research (HSR) and Equity and Patient Behaviour (EPB).

To test an OPAC 2.0, we activated the following Web 2.0 functionalities on our ILS, PMB 3.1.19(21):

- **Commenting**: an identified user may add a comment. Comments have to be approved by the librarian before being published on the catalogue; the librarian sees the user name. Comments are stored in the ILS and maybe listed by the librarian.
- **Rating**: when providing a comment, users may also add a rating. By default the rating is 3 out of 5 stars. The rating appears when the comment has been approved by the librarian. The record shows the average rating.
- **Tagging**: users may add a tag to a record. Suggested tags are submitted to the librarian for approval, the librarian sees the user name. When approved, the tags are added to the record.
- **Book suggestion**: the catalogue retains the borrowers of a book. When opening a record, users may see the books borrowed by other readers of this book.

We presented those functionalities to users during a staff meeting. We then sent an email to the users containing a list of their current loans and some instructions. We asked them to provide a comment concerning the books, and it was also suggested to add a tag. A reminder was sent two months later.

Survey

Three months after having activated the Web 2.0 functionalities on the OPAC, we submitted a questionnaire to our users. The first part aimed at defining a profile of our users regarding their use of Web 2.0 tools in their everyday live. The second part aimed at learning their attitude and use of the newly implemented OPAC 2.0.

Questionnaires were published on the intranet and administrated by one of the authors during the interview. Usual descriptive statistics were used to present the results.

Results

OPAC identified

We identified 70 software allowing the librarian to provide an OPAC (See Table I & II). 49 are ILS, 14 are specific software, 7 are CMS-based. While 34 provide at least one new generation OPAC feature, only 14 provide at least one of the OPAC 2.0 functionalities (See Table I).

- All of the 14 OPACs provide a comment functionality,
- The rating functionality is available in 9 of them,
- Tagging is available in 7 OPACs
- Only three provide a suggestion based on loans.

From those 14 OPAC 2.0, only six are ILS modules, two are specific software, and six are CMS-based. The specific software and CMS use a replication of the ILS catalogue by importing MARC data. Three out of the five best rated OPAC 2.0 are Free/Libre/Open-source software (FLOSS): one ILS module and two CMS.

Testing an OPAC 2.0

Our institution counts 35 experts, 30 were surveyed: 12 are physicians, 7 economists, 7 HSR specialists and 4 data analysts.

All but one users have a computer connected to Internet at home. From those 29 users, 26 surf the Web everyday, and 3 at least once a week, 20 search pictures at least once a month (via search engines or on specific sites like Flickr); 18 consult sites that share videos, at least once a month; and only 15 consult Blogs at least once a month. Only a few (3/29) publish information or objects

(photos, videos), 28 have already make use of e-commerce, 11 regularly, and 7 have already sold objects on the Web (See Table III).

Only two users have already provided a comment on a site when surfing the Web. Three don't know what it is and 15 know it but don't do it. Among the 30 surveyed users, 17 find such a function useful for the OPAC (see Table IV), but the others don't judged it useful because the comment is strongly dependant of the context where the book was used, and the person who read it. None of them used those comments to assess the pertinence of a book they wish to loan. Four months after the activation of the Web 2.0 functionalities, 8/35 experts provided 17 comments over 16 books.

From the 29 users surfing at home, only 2 have already rated an item, five don't know what it is and up to 15 know it I but don't use it. During the survey, users mentioned that they are not convinced by this functionality used alone because it is difficult to know what 3 stars out of 5 means without additional comment. The 17 ratings obtained with the comments during the test period of our OPAC 2.0 are distributed like this: one time 2 stars, six time 3 stars (default value), seven time 4 stars and three time 5 stars.

When surfing the Web, only 1 out of 29 users have already tag an item, seven don't know what it is and up to 13 don't use this functionality. Most users (20/30) consider tags as an useful functionality, but, during the interviews, several users mentioned that they are quite sceptical about the added value of uncontrolled tags. They would find it useful only if moderation by the librarian occurs. During the test period, 2/35 users have provided one tag each, even if they don't use this functionality in their private life. The first tag had no equivalent in the thesaurus used to index our records; the second tag combined two different concepts, but a term was already available for each concept.

From the 29 users surfing at home, 13 have already consult a suggested item, 3 don't know what it is and 8 don't use it. Most users (20/30) find this functionality useful for an OPAC. Some users mentioned that they are not convinced by suggestions based on the loans of other readers, mainly because the list provided would not be pertinent enough. Among the surveyed users, only four followed a suggested link during the test period. Nine were not aware of this functionality, and three did not search for books during the test period.

Discussion

Options to provide Web 2.0 functionalities

In this work, we intended to provide a quick review of the OPAC 2.0 market, not a systematic review: our list of 70 OPACs is surely not complete. From those, we identified 14 OPACs fitted with the Web 2.0 functionalities we retained for this work. This classification was made using the information provided by the editors' website. This information being often scarce, we may have misclassified some products. Since the situation evolves quite rapidly, the librarian wishing to acquire an OPAC 2.0 should thus contact the editors in order to get the latest information.

Even if some project are ongoing, few ILS provide an OPAC 2.0 at this moment. Since few libraries would change their ILS to gain those functionalities, librarians have to wait until their ILS evolves, or must find another way to get those. The standalone OPAC allows to separate the user interface, called "discovery platform", from the ILS(17). The user interface may thus be more easily enhanced. Still, several identified standalone OPACs provide functionalities that help the user to identify what he is looking for, like spelling correction or faceted search; but don't offer the participating functionalities we retained as 2.0. With the standalone OPAC, the ILS doesn't need to evolve to gain those 'buzz' functionalities. But, this option has also its cons: beside the catalogue itself and the Library website, the standalone OPAC add a third interface to the library. This could confuse the users who will have to switch all the time from the one to the other. The third way is to use a CMS. In this case, the records may be replicated into the CMS or queried from the catalogue. The comments, ratings and tags are generally stored in the CMS. Amazingly, all identified solutions are based on Open-source CMS and most were developed by librarians. This option sounds great. Providing the same advantages as the standalone OPAC, it allows the library to provide all its information within a single portal. Open source CMS evolving rapidly, the librarian will get the latest functionalities at no licence cost.

Several options are thus available for the librarian wishing to offer an OPAC 2.O. But such a project will also add work to the librarian: above the installation of the software, they must communicate about the new tools, train the

users; they must also manage comments and tags, take care about spams etc.

Evaluating the Web 2.0 functionalities provided by OPACs

Comment is often presented as an essential functionality of Web 2.0, letting users discussing over item from the site they visit(8). But this functionality has also some weaknesses, as shown with Amazon where readers comments appeared to have been provided by the authors themselves(22). Even if they find it useful for the OPAC, only eight users provided a comment. This is maybe related to the short period of test, but some users mentioned that comments may not help them to evaluate a book. They prefer to ask colleagues, identified as experts in the field, which book they recommend in place of searching such information in the catalogue. Such behaviour has also been shown with physicians searching an answer to a clinical question(23, 24). The small size of our institution could explain this behaviour, the more as most of our users are not Web 2.0 addict: they don't provide comments when they surf the Web. Additional research should be done to get a better understanding of this.

Rating is a quick and easy way to provide an advice about an item. Although, most users are not convinced by this functionality. This is consistent with their behaviour when surfing the Web.

Tagging has been shown to enhance remembrance of things(25). But implementing tagging in an OPAC 2.0 may also have some limitations. John Blyberg, creator of SOPAC (18), reported in his blog that providing tagging in the OPAC was not successful because only few users provided tags: the resulting folksonomy does not reflect the collection(26). Some users pointed another known weakness(8, 27): free tags may be inappropriate, inconsistent and introduce synonyms, plural words, polysemy. They were more interested by some process where the tags would be used as suggestion for new terms or entry terms that enhance the traditional subject taxonomies Such a procedure, already suggested (11, 28) or described in the literature(17, 27), was indeed planned. With the positive support showed by users, it has been rapidly implemented: after evaluation, the first suggested tag (economic evaluation) has been integrated into a specific thesaurus called 'KCE headings', and is now available for indexing new documents. The other, not relevant, was deleted. But the user input was used to add a supplemental existing indexing term to the record in order to ameliorate the book's description and further retrieval. Our catalogue possesses now a user driven thesaurus managed by an information specialist: tags are use to create new subject headings or new entries that link to an existing term. Some further enhancement could be done like getting the existing terms when providing a new tag. Such a functionality could help users to learn the thesaurus used in their OPAC.

Suggested readings have been well rated by our users. This is also the most used functionality when surfing. But some users are not convinced by suggestions based on the loans of other readers. Since our library is small (1100 books) and the function was recently implemented, the books listed are not always pertinent. The list of suggested books may be refined with some criteria, for example regarding the popularity of a book. This could be implemented in the future. A list based on keywords or authors is not directly provided by our OPAC: the user has to click on the interesting author name or heading to get related documents. This option could enhance the ease of use of the OPAC, maybe it could be added to the roadmap of our FLOSS ILS.

Knowing our users

Our survey showed that our users are still "Users 1.0". They surf regularly and use information from the Web, but most of them are not publishers. Among the Web 2.0 functionalities, the best known are comments and suggestions. Tagging and rating are less known. But even if the functionality is known, it is rarely used. When comparing the utilization of Web 2.0 functionalities with age, the youngest users don't show a better score than the above age class. Comparing the Web 2.0 profile of the Knowledge Manager to his users shows a strong contrast.

Due to lack of data concerning the use of Web 2.0 by a similar group, it is difficult to evaluate this behaviour. An attempt may be done when comparing the proportion of users registered at LinkedIn between KCE (35 scientists) and Smals, a Belgian non for profit agency providing IT support to governmental agencies (1000 IT people): at KCE, only 3 users (10%) have a profile in LinkedIn, at Smals, around 30% have one(29). Sandards & al.(30) reported that medical students and doctors also showed interest in Web 2,0

technologies like Blogs or Social networking , but again, most of them don't use them.

Our users showed interest in all OPAC 2.0 functionalities that have been described. But without real experience of Web 2.0 in their everyday live, and considering the specific context at KCE, their potential to transform themselves into "Users 2.0" should be further investigated.

OPAC development

When comparing the Web habits of our users to their advice concerning OPAC 2.0 functionalities, some conclusions can be drawn.

- **Rating** is not seen as valuable information and it is mostly not used by our users.
- **Comment** is seen as an interesting functionality but yields some questions regarding the pertinence. This functionality will be further evaluated.
- **Using tags** to ameliorate the indexing of documents with the help of the librarian is seen as a valuable function. This functionality will hence be kept and developed in that way.
- In our OPAC, **suggestions** were activated too recently to provide relevant results. This functionality will be further evaluated.

Thanks to those web 2.0 functionalities available through the OPAC, our catalogue will thus be enriched by users. But due to some restrictions related to privacy, it will not allow us to build a social community around the OPAC. To achieve this, a switch to a CMS-based OPAC seems to be the best option. But regarding the Web 2.0 profile of our users, the opportunity of this project will be carefully evaluated.

Conclusions

Web 2.0 is often presented as a must have. The "2.0" effect has reached the library field with concepts like Library 2.0 (16, 31), Librarian 2.0(28, 32) or OPAC 2.0(17). But several other fields gained the "2.0" extension: Health 2.0(33), Medicine 2,0(34), Science 2.0(35), Learning 2.0(36), Users 2.0(37), etc. But depending on the context, "2.0" may have different signification, the social aspect being often emphasised.

A librarian desiring to offer Web 2.0 functionalities within the OPAC has several technical options, some of them being even free of charge. Among those, CMS that allow to integrate the catalogue into a single library portal represent an interesting option for little structures wishing to simplify the access to information and the sharing knowledge within their team. Standalone OPACs are also great tools to experiment Web 2.0 functionalities before including them in the next generation ILS. It will be interesting to see how this market will evolve in the next few years.

Knowing users, their needs and their skills, their interest in those functionalities is still the most important aspect to investigate before implementing new tools. Are users really willing to participate? Do they have the needed skills? Do they have enough time? Are they supported to do it? As the involvement of users is necessary prior to implement new technical functionalities, the librarian must find an answer to those questions and be aware that every change of habit is a slow process. The librarian must also keep in mind that such a project will add some extra work. After having carefully evaluated all those aspects, librarians will have several possibilities to reach their objectives of constructing what could be the ideal catalogue.

At KCE, we use one of the ILS that possesses most of the Web 2.0 functionalities. We were thus able to test an OPAC 2.0 in real situation and get feedback from our users. The results obtained will now be used to fit our users' needs and wishes. Further research could still be made to evaluate other way of ameliorate the OPAC.

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Notes

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Appendices

Table I: list of OPAC 2.0

Name	Version	Provider	Licence*	Type**	Web 2.0 functionalities	URL
AFI OPAC 2.0	beta	Agence Française Informatique (AFI)	FLOSS	Standalone	Rating, Suggestions	http://afi.opac.2.0.free.fr/
Agent Verso	3.0	Auto-Graphics	Commercial	ILS	Comments, Rating, Tags	http://www4.auto-graphics.com/products/agentverso/agentverso.htm
Drupal with biblio module	5.1.15	Ron Jerome & Matt Koglin (Drupal)	FLOSS	CMS	Comments, Tags	http://drupal.org/project/biblio
Drupal with MARC module	5.1.dev	Michael Samuelson & Andrew Austin (Drupal)	FLOSS	CMS	Comments, Rating	http://drupal.org/project/marc
Koha	3.0 (beta)	LibLime	FLOSS	ILS	Comments	http://www.koha.org/
Millennium		Innovative Interfaces, Inc.	Commercial	ILS	Comments, Rating	http://www.iii.com/mill/webopac.shtml
PMB	3.1.18	PMB Services	FLOSS	ILS	Comments, Rating, Tags, Suggestions	http://www.sigb.net
Scriblio	2.3	Plymouth State University (WordPress)	FLOSS	CMS	Comments, Rating, Tags	http://about.scriblio.net/
SOPAC		John Blyberg (Drupal)	FLOSS	CMS	Comments, Tags	http://www.blyberg.net/files/
SPIP4PMB		Arnault Pachot (SPIP)	FLOSS	CMS	Comments, Rating, Tags	http://www.spip-contrib.net/Interface-PMB-pour-SPIP
Virtua		VTLS, Inc	Commercial	ILS	Comments, Rating	http://www.vtls.com/products/virtua
Virtual Browsery		MIT (Wordpress)	FLOSS	CMS	Comments	http://scripts.mit.edu/~gpadilla/blog/
Vubis Smart		Infor Library and Information Solutions	Commercial	ILS	Comments, Rating Suggestions	http://www.vubis-smart.com/html/homeeng.htm
VuFind	0.8	Villanova University	FLOSS	Standalone	Comments, Tags	http://www.vufind.org/

(*) FLOSS = Free/Libre/Open source software
(**) Standalone = specific application that is independent from an ILS, ILS = Integrated Library System, CMS = Content Management System

Table II: Other OPACs identified

Name	Licence*	Type**	URI	Name	Licence*	Type**	URI
Absothèque	COM	ILS	http://www.rii-diffusion.fr/	Heritage	COM	ILS	http://www.isoxford.com/
ADLiB Library	COM	ILS	http://www.adlibsoft.com/	Igloo	FLOSS	OPAC2	http://sourceforge.net/projects/iglooyha/
Aleph	COM	ILS	http://www.exlibrisgroup.com/	Indigo	COM	OPAC2	http://www.tlcdelivers.com/
Alexandria	COM	ILS	http://www.companioncorp.com/	jOPAC2	FLOSS	OPAC2	http://sourceforge.net/projects/jopac2
Antigone	COM	ILS	http://www.angelfire.com/biz/molinay/indexfr.html	KLAS	COM	ILS	http://www.klas.com/
Aquabrowser	COM	OPAC2	http://www.medialab.nl/	LearningAccess ILS	FLOSS	ILS	http://www.learningaccess.org/
Atalante	COM	ILS	http://www.decalog.net/	Library automation	COM	ILS	http://www.follett.com/
Atriuum	COM	ILS	http://www.booksys.com/	M2L	COM	ILS	http://www.minisisinc.com/
Avanti MicroLCS	FLOSS	ILS	http://www.avantilibrarysystems.com/	Microbib	COM	ILS	http://www.microbib.fr/
BCDI Web	COM	ILS	http://bcdi.crdp2-poitiers.org/	NewGenLib	FLOSS	ILS	http://www.newgenlib.com/
BIBIS	COM	ILS	http://www.squareis.com/	Obiblio	FLOSS	ILS	http://obiblio.sourceforge.net/
BiblioMaker	COM	ILS	http://www.bibliomaker.ch/	oBiblioOPAC4J	FLOSS	CMS	http://obiblioopac4j.sourceforge.net/
Blacklight	FLOSS	OPAC2	http://blacklight.rubyforge.org/	OpenGalaxy	COM	ILS	http://www.ds.co.uk/
Cadic Intégrale	COM	ILS	http://www.cadic.fr/	OpenOPAC	FLOSS	OPAC2	http://www.bl.fcen.uba.ar/openopac.php
Carthame	COM	ILS	http://www.decalog.net/	Orphée	COM	ILS	http://www.aid-computers.fr/orphee/
CatalogWsapps		OPAC2	http://www.lib.ncsu.edu/dli/projects/catalogwsapps/	Paprika	COM	ILS	http://www.decalog.net/
Co-Libris	COM	ILS	http://www.colibris-biblio.net/	PERGAME	COM	ILS	http://www.pergame.net/
Cybertools	COM	ILS	http://www.cybertoolsforlibraries.com/	Polaris ILS	COM	ILS	http://www.polarislibrary.com/
Destiny	COM	ILS	http://www.isacsoft.com/	Portofolio	COM	ILS	http://www.bibliomondo.com/
Emilda	FLOSS	ILS	http://www.emilda.org/	REGARD	COM	ILS	http://www.grics.qc.ca/fr/produits/doc_loisirs/regard.aspx
Encore	COM	OPAC2	http://www.encoreforlibraries.com/	SeZhame	COM	OPAC2	http://www.decalog.net/
Endeca	COM	OPAC2	http://www.lib.ncsu.edu/endeca/	Sidney plus	COM	ILS	http://www.ils.ca/
EOS Web	COM	ILS	http://www.eosintl.com/	Socrate	COM	ILS	http://www.socrate.be
Evergreen	FLOSS	ILS	http://www.open-ils.org/	Symphony	COM	ILS	http://www.sirsidynix.com/
Fac-Back OPAC	FLOSS	OPAC2	http://code.google.com/p/fac-back-opac/	Talis Prism	COM	ILS	http://www.talis.com/
Flora	COM	ILS	http://www.ever-team.com/default/	Unicorn	COM	ILS	http://www.sirsidynix.com/
Genie	COM	ILS	http://www.inmagic.com/	Voyager	COM	ILS	http://www.exlibrisgroup.com/
Gnuteca	FLOSS	ILS	http://www.gnuteca.org.br/	Worldcat Local	COM	OPAC2	http://www.oclc.org/us/en/worldcatlocal/

(*)FLOSS = Free/Libre/Open source software ; COM = commercial(**), OPAC2 = specific application that is independent from an ILS, ILS = Integrated Library System, CMS = Content Management System

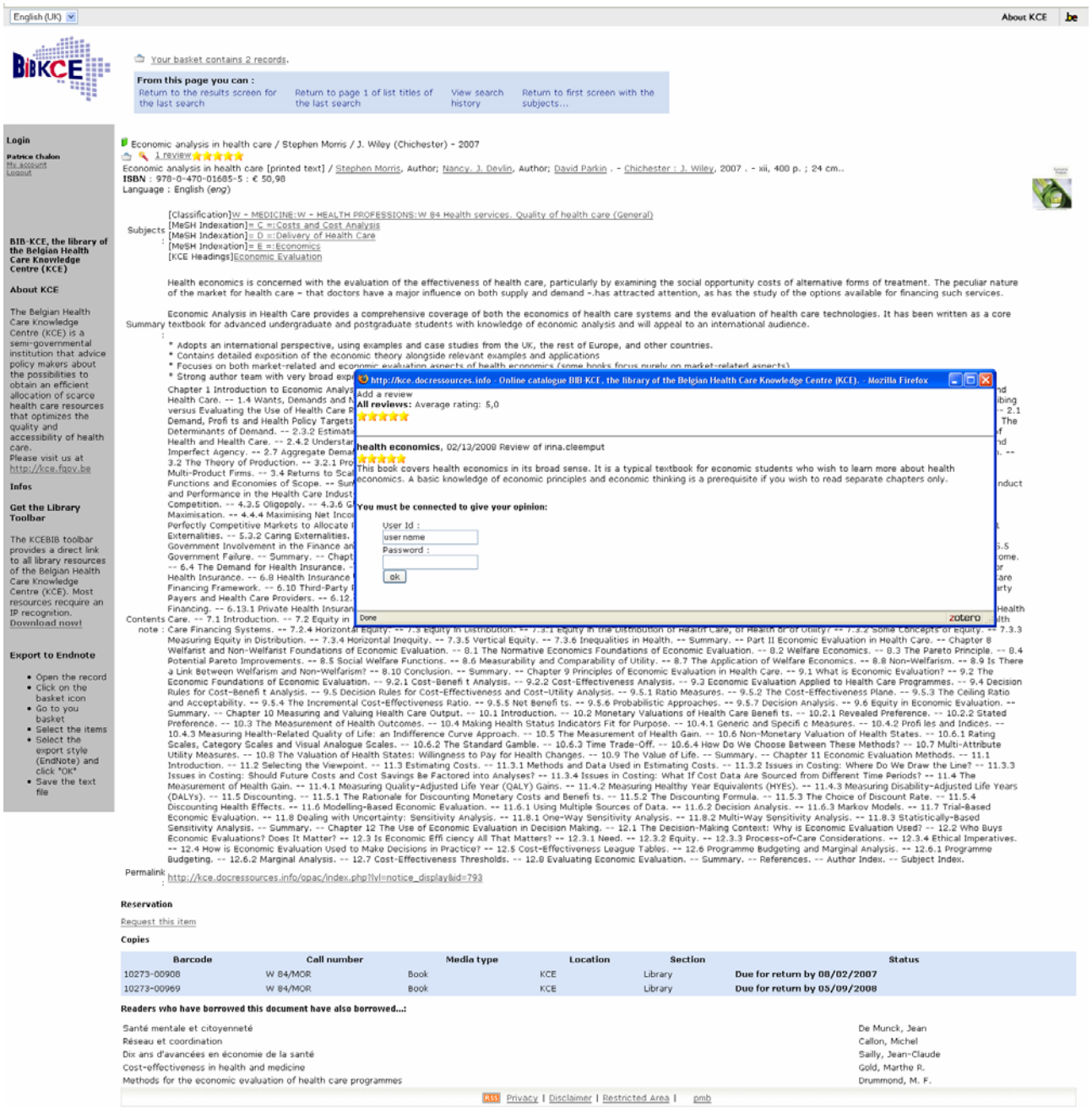
Table III: Behaviour of users when surfing the Web

		Pictures	Videos	Music	Blogs
Search the Web for					
	Yes	20	18	11	15
	No	9	11	18	15
Add comments					
	Yes	2	1	0	3
	No	15	16	9	12
	Don't know	3	1	2	0
Tags					
	Yes	1	0	0	0
	No	12	13	8	11
	Don't know	7	5	3	4
Rate					
	Yes	2	2	0	3
	No	13	15	9	11
	Don't know	5	1	2	1
Use suggestions					
	Yes	9	13	4	7
	No	8	4	6	8
	Don't know	3	1	1	0

Table IV: Evaluation of OPAC 2.0 functionalities

	Very useful	Useful	Not really useful	Not useful
Comments / Rating	5	12	11	2
Tags	5	15	10	0
Suggestions	0	20	8	2

Figure 1 : Enriched record from our OPAC



http://kce.docressources.info/opac/