LIBRARIES IN THE CHANGING ONLINE ENVIRONMENT

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Abstract
In the last few years, libraries have been faced with a rapidly changing online environment that offered users a number of engaging and competitive services. This, together with the fact that more and more users are moving and interacting online, has forced libraries to start thinking about their role and presence in this virtual world. Although applying the Web 2.0 concepts has been repeatedly proposed as a solution for many of the libraries’ problems, it now seems that it may not be enough. We will look at the advantages and possible pitfalls of the 2.0 movement and ask ourselves of the future prospects it may offer in the context of virtual library environment. We will also discuss on what the 2.0 and future movements really mean for libraries and librarians and how the new concepts have been accepted and employed in Slovenia.

1 THE CHANGING ENVIRONMENT
In the last few years, the environment surrounding libraries has been transforming with a rapid pace: new generation of users or better yet, old generation of users with new expectations, needs, and behaviour on one end, the quick developments of the web on the other end, and changes in the society in general have been just some of the factors. In this paper we will focus mostly on the changes in the web environment, that is the web 2.0 movement and how it translates to libraries.
A number of different definitions have been given for web 2.0, but we can say that it essentially presents a new way we think about and use the web\(^1\). It has brought innovative services and set a new standard for user-centred design by creating more intuitive tools, demanding constant change, flexibility and evaluation while promoting user engagement, sharing, collaboration, interaction, and personalization. Web 2.0 does, however, have a few pitfalls libraries should be aware of. One of them is certainly the “network effect”, which tells us that the usefulness of the service depends on the number of its users: the more users, the more useful and valuable a service becomes. Due to this, a potentially good service will fail in case of small user participation. And we must be aware of the fact that the vast majority of users are not contributors: around 10-15% of users will contribute by editing or adding comments and only 1-5% of users will actually create and add new content\(^2\).

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2 2.0 IN LIBRARIES

Libraries have been among the early adopters of the web. However, it seems that with the rapid development in the late 1990s, libraries have failed to keep up with all the changes, thus frustrating their web savvy users. With the success of Google and Amazon and the rise of web 2.0, libraries have been given a wake-up call and are reconsidering their role and position in the online environment. The developments on the web have shown libraries new possibilities of exploiting technology to their advantage and delivering their services in the virtual space.

In the web 2.0 movement we can recognize two distinct levels: on the one hand there is the underlining idea, the “2.0 philosophy”, which is the driving force behind the changes, and on the other hand we have the technology and the tools that try to transform these ideas into reality. While the technology, novel tools, services, and features are often the main focus when talking about web 2.0, it is important to remember and understand the philosophy behind the changes: web 2.0 is not really about the technology but about what we do with it and how we use it. Especially in the library community, we could say that embracing the concepts of web 2.0, the idea of perpetual change, flexibility, evaluation, simplicity, openness to and collaboration with users is even more important than the implementation of numerous popular web 2.0 tools.

The main library 2.0 idea is to essentially create a virtual space and environment that will not only offer library resources and services online, but also allow for users to communicate with librarians and other library users and enable them to express their opinions, suggest changes, and be part of different library projects. An important aspect of 2.0 idea is also the way resources and services are provided to users; it asks for well designed, intuitive features that will provide users with a positive experience, encourage discovery, learning and entertainment, enable personalization of content and privacy settings.

There is, however, somewhat a paradox connected to library 2.0: while applying 2.0 ideas is believed to be necessary to keep up with the changes and attract users, studies show that users often are not aware of these services. Morris and Allen\(^3\) report that even if further library 2.0 technologies would be implemented at the library, it would be unlikely that many of them would be used (students showed most interest in librarian-supplied book reviews, the display of related resources, and updates on new library materials, especially those related to their courses). According to the research, students find most value in the contents library is able to provide and the least in social networking services\(^4,5\). Then again, the priorities might be different with users of public libraries.

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It seems that sometimes libraries just try to follow the 2.0 trends without proper analysis, determining what they would want to achieve with the chosen tool or service or whether it would even work in their environment. Especially the latter often seems to be the problem as libraries serve very diverse environments: things that work well in one library will not necessarily be useful in another one. That is why libraries should base their services on user needs; they need to start by analysing their users and the current library’s web presence and setting the goals they want to achieve with online services. Only after knowing the problems they want to solve, can librarians seek the technology to accomplish that. 2.0 features can certainly help in improving some aspects of library’s web presence, but we must realize that they are not the ultimate answer. Even more, without a good vision and execution, 2.0 tools can become just another one of the problems.

The success of web 2.0 and therefore also library 2.0 is highly dependant on two things: a) the ability of librarians to establish the right 2.0 services and offer them in the best possible way and b) users themselves as they are the key component in even creating the 2.0 experience. In both cases, librarians need to understand and know who their users are and how they function in the online environment.

3 WEB 2.0 IN SLOVENE LIBRARIES

3.1 AN OVERVIEW
Examining the application of web 2.0 ideas in Slovene libraries, we must look at library homepages as well as some other library-provided online services, many of which are actually a product of joint library collaboration.

a) School and academic libraries
A majority of school and academic libraries have not implemented web 2.0 tools or services, neither have they used social networking or photo sharing platforms such as Facebook or Flickr. Library websites generally offer users only key information about the library and some external links to information sources. The limited presence may also be due to the fact that these libraries are usually presented within their institution’s website and therefore limited by and within it. There are some exceptions especially in the academic sphere, where a small number of libraries for example implemented RSS news feeds and embedded the possibility for users to suggest acquisitions or state their opinion of the library through the website. Within the academic library network we would highlight two libraries: the National and University Library (NUK) and the Central Technological Library (CTK). Both libraries are independent, but operate within the University of Ljubljana system and have gone further in search of library 2.0, mainly with special projects we will present later on, but also with some other applications. NUK has, for example, a very active Facebook profile (Figure 1) that brings users daily news about the library and its events, while CTK uses its Facebook profile as well as twitter account, a blog, and newly set up Netvibes page (Figure 2) to communicate with users (however, their homepage is still a typical representative of the 1.0 web).

Figure 1: NUK Facebook profile enables users to ask questions and receive regular updates on library events.

Figure 2: The newly set up Netvibes page for CTK does not bring many new features and the execution makes us question its usability and usefulness.
b) Public libraries
Also public libraries are slowly working towards creating better virtual spaces for their users. While we cannot say that many of them have implemented 2.0 tools, there has been a noticeable progress in their homepages. They generally give a professional and up-to-date feel with news updates and offer a clear overview of the contents. While the majority of libraries still include only basic information about the library and its services, a few of them regularly create web polls about library services and include some information users might find appealing, such as library provided recommendations lists, book reviews, lists of new acquisitions, or lists of most-wanted books. One library (Radlje ob Dravi Library) even enables “reader to reader” suggestions, but the service has so far not been used.

Two libraries that stand out in their vision of a public library virtual space are Celje and Kamnik central libraries. Kamnik Central Library has used mashups to show the location of the library, present videos about some library services and display the weather forecast and current news on culture (Figure 3). Users can also register and add events to the calendar or start their web query right from the library webpage. The second library, Celje Central Library, created a blog for library news and special web pages for each end-user group (such as children and seniors). This way kids can draw a picture online (Figure 4) and send it to the library, school children can play a few simple games and get information on library events for youth, teenagers can browse through recommended lists of books for school work and seniors can find various information on activities for their age group in the library and broader community. Celje Central Library is also the only library that has embedded the catalogue into its website (Figure 5) and that offers personalized email news of new acquisitions.
Figure 3: Kamnik Central Library presents a varied selection of information on its dynamic homepage.
Figure 4: Celje Central Library engages the younger users by enabling them to draw a picture or play a game.

Figure 5: COBISS OPAC has not been seamlessly embedded into the library homepage, but the move nevertheless represents an important step forward.
c) Joint efforts

There are also some other library spaces on the web where we can look for 2.0 applications. Digital Library of Slovenia (dLib.si) and Digital Library of University of Ljubljana (diKUL) are two such examples. dLib.si is a portal, developed and maintained by NUK, but 25% of the digitised cultural heritage contents is provided by other libraries. The newest portal interface has a number of 2.0 features, such as an RSS feeds, the possibility to tag a record, report an inappropriate tag, present a record in Facebook account or bookmark it using Delicious (Figure 6). Users can also easily send their opinion through the portal, read the portal’s blog or add dLib.si as their Facebook friend. The new portal is much more intuitive and offers several browsing possibilities such as faceted search, a cloud of most popular queries, and random listings from the collection (Figure 7). According to the manager of the portal, the statistics shows that users spend more time on the new interface, probably due to the browsing options. diKUL on the other hand is a federated search service provided by a joint effort of a few major university libraries. diKUL also offers some “new generation” approaches to searching: using facets to refine the search, google-like query box, and relevance ranking. While it does not have any user participation services, it does offer some personalization options.

![Image of dLib.si](image-url)

**Figure 6:** Users can tag a record, display it in Facebook or bookmark it using Delicious.
Also public libraries have created a few joint projects. Here we will briefly present three examples of webspaces, dedicated to library material presentations: one created by librarians in Celje region, the other by librarians in Primorska region, and the third by librarians of the Ljubljana Metropolitan Library which has recently been established by integrating five libraries serving the broader Ljubljana area. In all three cases, libraries created special sites where librarians present and review books, in some cases also movies and events (Ljubljana Metropolitan Library). “Primorci beremo” project gives users the option to rate books and leave comments for each book (Figure 8). The latter is offered also by the Ljubljana Metropolitan Library, where they even invite users to join the team. Users however cannot simply add new posts for a new book or a movie, as they need to apply for the “job” via email first. The project in the Celje region does not enable users to directly participate, but they can leave an email and their recommendations are displayed in the “Readers recommend” corner.
3.2 DISCUSSION
As we have seen in the brief overview of the situation in Slovenia, libraries still do not offer many features in line of active user participation, communication with peers or personalization. A large number of small libraries without proper technical support or manpower to deal with the changes indicates, that it would be unrealistic to even expect a broad adoption of 2.0 throughout the library network. Libraries need to be careful in their choice of new features, as the number of potential users of each library is very limited and therefore not reaching the critical mass needed for many of the 2.0 services to even become useful and reach their aim. Looking at the implementations of web 2.0 features in Slovene libraries, these pitfalls become apparent. As we know, there are not many users who would actively participate on library websites and the lack of communication from users can be dangerous for two reasons: firstly, 0 comments or empty spaces where there were supposed to be user supplied contents gives a deserted feeling and discourages other users from contributing or using the service, and secondly, librarians may quickly loose enthusiasm when users do not make use of the services provided.

We must understand that it is not enough to simply create 2.0 services and tools: librarians must first carefully plan what and how are they going to implement and, last but not least, how they are going to maintain it. Poorly implemented (even if they are 2.0) or maintained features (one such example are blogs that are used only every now and then) only make
users question the quality of library services in general and may even reduce library value. For example, CTK gradually set up a number of popular 2.0 communication channels (twitter, blog, Facebook, Netvibes), but most of them are hardly used and they are also scattered all over the web, without a clear vision or a sense of purpose. This indicates that the library has not first evaluated its current services, developed a clear plan of what it wanted to accomplish and looked for best ways to achieve that.

Another problem we continuously encountered on Slovene library websites (and which also shows the lack reflection) was difficult user communication with the library. Instead of embedding a simple form for commenting on library services or suggesting new purchases, users are often directed to their email account, which is a slow and outdated process that only leads users away from the website and discourages them from interacting with the library. Even libraries that have implemented a communication form in many cases require providing data that users might not feel comfortable sharing (e.g. forms for suggesting purchases often require for the user to state his or her full name and other personal data).

A large number of external links can also drive users away from the website. For example, the “Ask a librarian” service should be implanted into library websites and not require additional clicks to contact the service. The same goes for the library catalogue (although we do acknowledge that the specifics of the Slovene system do not currently allow much room for manipulation in that area). Mushupung services is part of the web 2.0 idea and one that could help libraries create a more comprehensive web space where users could spend time discovering new things, solving their information problems and having fun at the same time.

Within the changes libraries are applying to their websites, we believe that one of the most important, but often overlooked, is the richness of content. The progress from plain facts about the library to the actual creation of useful content for library users such as recommendations lists, lists of useful school books, books on certain topics, book reviews, presentation of new library materials, news about the local environment etc. is what will define the library’s role in its community. If the library offers unique and useful information, people will visit and use the website. At this point we should also emphasise that linear lists of book titles, which we often see also in Slovene libraries, will not do the trick. Users want complete information. They want to see what the book looks like, what it is about and whether it is available in the library all in one place and instantaneously. This is something libraries in Slovenia still need to work on.

Once libraries will be able to attract and keep users as regular visitors of the website, they will also be able to apply more 2.0 services for user-to-user interaction and communication. Until then, all services that depend on user participation will probably be destined for failure. The best advice we could give on this topic is, that every time a user returns to the page, there should be something new. A very good illustration of that concept can be, for example, found in Phoenix Public Library website, where they consistently provide new information users could find interesting at that moment in time: in the tax season they offer users tips of taxes, in the flu season they connect users to important issues on that topic, before Christmas they provide staff picks for holiday gift giving and so on.

All and all, we could divide library 2.0 features into 3 different groups:

1. usability – features and ideas that add to the site’s usability and are independent from the number of its users (e.g. personalization options, private lists of potentially interesting library materials, communication forms, RSS or e-mail notification on library events, mashups, browsing and discovery options)
2. social networking – features that libraries can use for marketing and connecting with their users (e.g. twitter, Facebook, chats)

3. content – features that allow users to contribute content to the site and at the same time require the library to abandon the total control and start trusting the users to create valuable data (e.g. rating, commenting, reviewing, tagging, sharing book lists)

Each and every one of these components can be important, but not in every situation and not necessarily all of them. The best rule would, however, be to start with usability issues and then continue to the other two features.

We can say that Slovene libraries are slowly opening up their virtual spaces, searching for better communication with users and creating websites and services that could be more comprehensive and to an extent equivalent to those offered in the physical library space. There are a handful of libraries leading the way in the development, but what seems to be more important is that, in creating 2.0 services, libraries have actually started using 2.0 principles. The nature of web 2.0 namely demands sharing, participation, openness, and collaboration, and we have noticed that Slovene libraries have started to do just that - work together and share information in order to creating better services for users.

And that is what libraries are going to have to do in order to succeed and create useful and competitive services and user experience. The success of Web 2.0 and therefore also library 2.0 is highly dependant on the users themselves as they are the key component in the creation of 2.0 experience. Without collaboration and shared services, libraries will not be able to develop the full potential of 2.0 environments and will, once again, be left behind in the 3.0 developments that have already begun. Not keeping up with the changes on the web, users may soon discard libraries as relevant players in the online environment.

4 CONCLUSIONS

Are libraries in Slovenia ready for 2.0 environment? Based on our overview, we would say that there is still not a thorough understanding of the concept, its potentials and possible drawbacks. 2.0 can enrich libraries by moving them forward or as Breeding\(^6\) wrote: by helping them shift from their outdated views of the web and move forward to newer technologies and services. That is important as it enables libraries to better serve the new generation of users and provide an enriched set of contents and services. However, we must not become too focused only on 2.0. While web 2.0 components do help libraries in making websites more efficient, promoting the library in delivering content and in engaging users, libraries still struggle with providing solid 1.0 grounds\(^7\) and must therefore not forget to deal with the issues that still remain. This problem (also known as lipstick-on-a-pig syndrome) is not present only in Slovene libraries, but also elsewhere\(^8\).

In the Slovene case, we believe that libraries have come across a good solution to some of the problems the 2.0 approach presents for small libraries. Collaborating in the creation of


2.0 services is a way to surpass some of the issues (such as the critical mass of participants) and give librarians better chances for maintaining the service and creating new content. While at the moment the projects are still scattered among regions and many of them would need some rethinking, we believe that they present good grounds for further developments. We can see the future in an even more nation-wide 2.0 system that would for example connect all public libraries or all academic libraries. This could work well also combined with our union catalogue, which is another service that could really use some 2.0 functionality such as personal bookshelves, relevance ranking, and browsing and discovery options. We would also hope to be able to more seamlessly connect library websites to the catalogue and its contents.

Web 2.0 has given libraries the opportunity to really change and reinvent their virtual spaces, turning them into valuable third places for all users. How libraries will or will not use that to their advantage is still to be seen as the process is only just beginning for most of them.

BIBLIOGRAPHY


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