Library 2.0 and the Changing Landscape of Information Services in Academic Libraries

Traditional models of libraries offering information services are not working for current generation of students. Robinson (2008) discusses the current generation of undergraduate and graduate students as being digital natives. These digital natives have grown up in an environment surrounded by rapidly evolving technologies. This means that today's academic library users think about technology and information differently than previous generations, and expect instant access to information. I can term them to be 'netGen' users. With this, academic libraries need to evolve by changing to user-oriented services, allowing users to participate in the creation of content, keeping the users constantly updated and building services based on users' feedback. To achieve this, libraries need to incorporate web 2.0 tools in the way they provide services to their users. Some of the tools to take advantage of include creation of blogs, wikis, flickr, youtube, facebook, RSS feeds, and slideshare among others. Another obvious change noted today is the development of university campuses all over the country. For an institution of higher learning, a library is fundamental. For most of these campuses, one will find small rooms as libraries; with minimal resources and a few staff members. This is a challenge and Library 2.0 being a combination of both physical and virtual spaces and services can offer solution to such campuses. Nowadays many universities are offering distance learning and evening programmes to cater for the working class people who want to advance their careers. Do they have to come all the way to visit the library to get information for their studies? No. Library 2.0 is their way out and therefore academic libraries have to invest in these tools, in addition to off-campus access to e-resources. This paper will discuss library 2.0 as the new model of information provision to library users and especially in the academic world. The library 2.0 tools and technologies will be discussed and how they can be applied in an academic library.

Keywords: Library 2.0, Web 2.0, Academic libraries, Library service models, Information services

INTRODUCTION

S.R. Ranganathan's Fifth Principle of Library Science states that "the library is a growing organism" (Ranganathan, 2006). In today's libraries, this principle is clearly exemplified by the number of new forms of information sources and services that have started being provided and offered in libraries. The boundaries of libraries have broadened to accept these new sources and services into their daily operation. The resources of the libraries have grown from physical objects to virtual objects, from card catalogues to online public access catalogues (OPACs), and cooperative cataloguing to social cataloguing with an ability to comment, review and reuse with the application of Web 2.0 techniques (Ram, K, & Kataria, 2011). Most academic libraries in Kenya have not been left behind in this transformation and have therefore evolved to embrace some of these techniques.

Library service models

Kwanya, Stilwell, & Underwood, (2011) state that library service models can be perceived as types of library services which are differentiated through unique characterization such as type of collection held, target users, type of library (academic, research, school or public) in which it is offered, special features of the services offered, service philosophy, and general library organization.

For a long time, academic libraries offered information services using the traditional model of libraries being repositories of information and librarians being passive intermediaries in its transfer and interpretation. Then they moved to what is termed as 'hybrid' library model. This is where the traditional model runs parallel with digital model. This means offering services and providing information sources in both print and 'e' formats. This is the most common scenario in most academic libraries in Kenya today.

However, this is not working well with the present generation of students. Robinson (2008) describes the current generation of undergraduate and graduate students as being digital natives. He adds that, these digital natives have grown up in an environment surrounded by rapidly evolving technologies. Therefore this means that today's academic library users think

about technology and information differently than previous generations, and expect instant access to information. This generation prefers a digital library model.

A digital library is a collection of services that are closely modeled on the traditional print library. The bibliographic forms are the same (books and journals); they just have an "e-" in front of them. The tools used to find them are the same (catalogues); they just have the word "online" in front of them. Some things are significantly different, although each textual document has a classification number; this does not mechanize the retrieval of the text – you do not have to go to a shelf location to find the information object. The object is pulled through the hyperlink onto the screen. So it is "the same old same old", but faster.

Since most academic libraries cannot afford to have a pure digital library model, they have opted to revamp their hybrid models with the inclusion of web 2.0 in information provision, so as to cater for these digital natives. This has given rise to library 2.0 model.
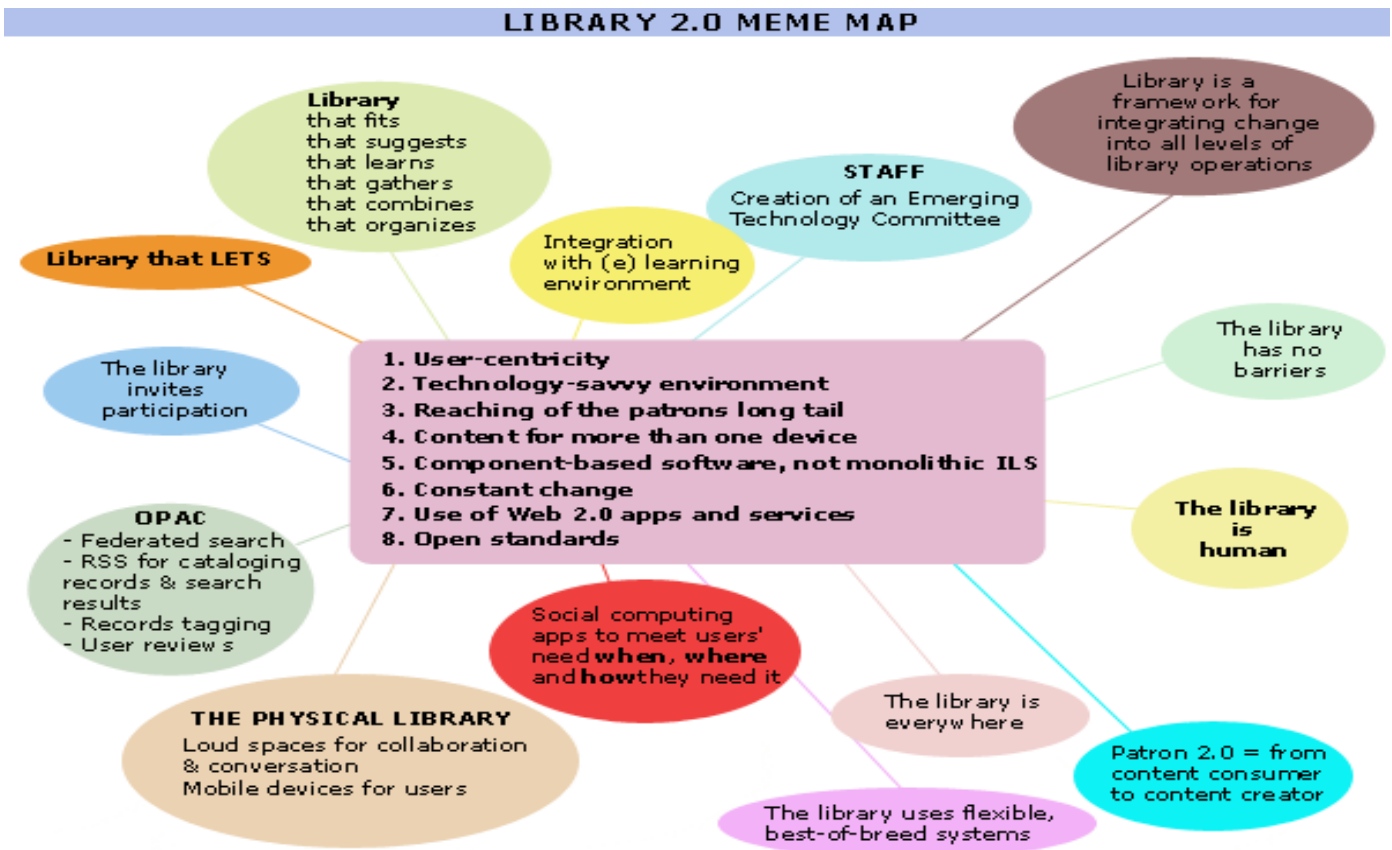
Library 2.0 model

Kwanya et al., (2011) explains that, library 2.0 is a model of library service which harnesses the power of emerging information and communication technologies to create a dynamic physical and/or virtual library platform which is defined and controlled by the users and librarians and which facilitates the delivery of a superior library experience for the users: anytime and anywhere.

Library 2.0 can be defined as a set of innovative technologies and services that are integrate with the library, facilitating the use of library resources and services, allowing library user to participate and keeping the librarians updated in their field (Zanin-Yost, 2010). So Library 2.0 is a service philosophy that is guiding libraries in their effort to win new users while, at the same time, acknowledging that our current service offerings are insufficient and inflexible. Therefore library 2.0 can be termed as finding new ways of involving patrons by letting them contribute comments, add tags, rate library items, and get involved in other interactive and collaborative activities.

Casey (2006) notes that library 2.0 sees the reality of our current user-base and says "not good enough, we can reach more people". It seeks to do this through a three-part approach: reaching out to new users, inviting customer participation, and relying on constant change. Much of this is made possible thanks to new technologies.

Notess, (2006) explores the importance of integrating web 2.0 systems into mainstream library and information services as it support, promote and extend information services to patrons or user community.

LIBRARY 2.0 MEME MAP

Library that fits that suggests that learns that gathers that combines that organizes

STAFF Creation of an Emerging Technology Committee

Library is a framework for integrating change into all levels of library operations

Library that LETS

Integration with (e) learning environment

The library has no barriers

The library invites participation

1. User-centricity
2. Technology-savvy environment
3. Reaching of the patrons long tail
4. Content for more than one device
5. Component-based software, not monolithic ILS
6. Constant change
7. Use of Web 2.0 apps and services
8. Open standards

The library is human

OPAC
- Federated search
- RSS for cataloging records & search results
- Records tagging
- User reviews

Social computing apps to meet users' need when, where and how they need it

THE PHYSICAL LIBRARY
Loud spaces for collaboration & conversation
Mobile devices for users

The library is everywhere

Patron 2.0 = from content consumer to content creator

The library uses flexible, best-of-breed systems

Source: (Biancu, 2006)

The library 2.0 meme map was developed by Bonaria Biancu in 2005. This map helps in understanding the concept of library 2.0. The central part represents the principles of library 2.0, and then we have the elements involved in creation of a library 2.0 being the physical library, staff, library management system.

With this new service model, the focus in most academic libraries is changing to user-oriented services, by allowing users to participate in the creation of content, keeping the user constantly updated and building services based on users' feedback. To achieve this new model, libraries are incorporating web 2.0 tools in the way they provide services to their users. Some of the tools include creation of blogs, wikis, flickr, youtube, cluster maps, Google page translator, Google earth, facebook, LinkedIn, RSS feeds, and slideshare among others.

APPLICATION OF WEB 2.0 TOOLS IN INFORMATION SERVICES

Web 2.0 encompasses several technologies and services, these are:

Really Simple Syndication (RSS)

This is a web feed used for syndicating content from internet. It informs users of updates to the subscribed sites. Many web-browsers have built-in-feed readers or aggregators that easily add feeds to web page.

In libraries, this can be applied to:

- Announce the availability of new resources in a particular subject to a particular clientele. This can effectively carry out current awareness service (CAS) and selective dissemination of information (SDI).
- Promote events organized by the library to its users.
- Integrating library services through RSS feeds. Users can be informed of any new service a library is introducing.

Examples;

http://opac.library.strathmore.edu/cgi-bin/koha/opac-search.pl?idx=kw&q=financial%20management&count=50&sort_by=acqdate_dsc&format=rss2

http://maktaba.ku.ac.ke/cgi-bin/koha/opac-search.pl?idx=kw&q=finance&count=50&sort_by=acqdate_dsc&format=rss2

Instant messaging (IM)

This is real-time communication between two or more people based on typed text, or images. It is a popular mode of communication because of its quick response time, ease of use and the ability of a librarian to multitask. Various programs are available to offer this service viz; livezilla, meebo etc.

This has been successfully implemented at Strathmore University Library whereby it is being used for:

- Providing virtual reference services, whereby online library users can ask questions, requests and get responses instantly.
- Checking availability of colleagues at desks of work, instead of walking to an office and miss a colleague thereby wasting time and energy; IM is used to check availability of staff.
- Conducting online meetings, this does not require a member to be within campus to have the meeting. This can be done remotely.

Example
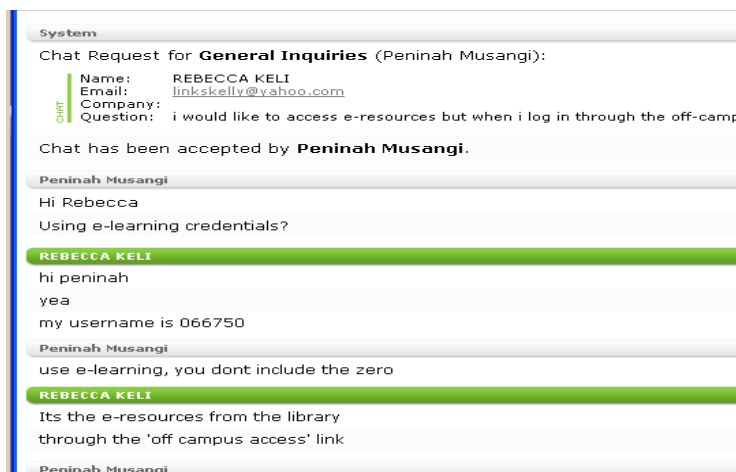
Social networking

Social networks enable messaging, blogging, streaming media, and tagging. MySpace and FaceBook enable users/libraries to share themselves with one another. Del.icio.us enables users

to share Web resources and Flickr enables the sharing of pictures. Myspace and facebook are the two popular social networking sites. Myspace allows organizations to create their own profiles, pages and can be used by libraries. Facebook allows individual librarians to create profiles.

This has been applied in:

- Libraries creating a page to reach to new users. Most academic libraries have a Facebook page, some with Twitter pages etc.
- Social networks enable librarians and patrons to interact, share and change resources. This can be achieved since users can comment or suggest what resources are useful.
- Building network among interested group in discussing issues of common interest. This is through the discussion forum in the social networks which give an opportunity for groups to discuss an issue affecting them.
- Users adding content to the library catalogue. This includes book reviews or other comments on particular resources in regard to their usefulness or applicability to specific subjects. Since there is no single text which can sufficiently cover a whole subject at university level, commenting on a resource on where it can be used in a particular subject is good and helps other users.

Examples:

https://www.facebook.com/pages/Kenyatta-University-Library/239904162689026

https://www.facebook.com/pages/Strathmore-University-Library/152833268081020

https://twitter.com/#!/strathlib_ke

Tagging

A tag is a keyword added to a digital object to describe it. Tagging essentially enables users to create subject headings for the object at hand. As Maness (2006) describes, tagging is essentially Web 2.0 because it allows users to add and change not only content (data), but content describing content (metadata). In Flickr, users tag pictures. In LibraryThing, they tag books. In Library 2.0,

users could tag the library's collection and thereby participate in the cataloging process. Tagging simply makes lateral searching easier.

Tagging can be applied to:

- Library management systems for editing the subject headings to user point of view and thereby enhancing the indexing and relevancy of the searches, making the collection more dynamic.
- Facilitate lateral searching.

Blogs

Blogs are powerful two-way based tool, whereby library users enter thoughts, ideas, suggestions and comments. A blog entry may contain text, images or links to other blogs and websites. Any library user can publish a blog post easily and cheaply through a web interface, and any reader can place a comment on a blog post.

Blogs can be used in libraries:

- To serve as a platform for users to file their concerns, queries and suggestions regarding the services and activities of the library.
- For collection development where users request resources.
- As marketing tools of the information resources.
- As a tool for posting minutes of meetings for necessary actions.
- As discussion forum.

Examples:

http://kemulib.blogspot.com/p/e-books.html

Important elements to apply in building library 2.0

According to Farkas (2010), there are certain elements to be put in place in building a library 2.0, they include:

1. Realize that **we are all participants** in creating library 2.0. Students and staff can all contribute through the use of blogs and wikis. By realizing that we are all involved, we need to take our library into the community. We need to realize that we don't need to be perfect and that being simple and taking our knowledge to the users is critical.

2. We need to **continually question things.** What are we doing and how can we do this better? Do we need to change the way that users access library resources? How can we effectively get the resources to the community that needs them? How can we actively market our resources?

3. We need to realize that **we don't know everything.** We need to be collaborating and sharing resources with subject departments. A wiki can be set up to collaboratively source and share important resources that as a librarian I would not be aware of. Social bookmarking can also be used for this.

4. We **need to be transparent.** The university community needs to know what we are doing and how we can help them. We need to dangle our presence in the community both physically and virtually. Allowing others to make decisions will allow our library to have wide ownership. All library staff need to feel that their decisions are worthwhile and will be acted upon.

5. We must not be forced into the trap of buying into the tools and forget about **the needs of the learning community.** We need to build a learning culture to achieve this. Providing professional development to staff and especially small subject groups to encourage others to embrace and use 2.0 technologies in their classrooms is critical. Staff need to know how to create a blog or a wiki. Having an emerging technology committee actively seeking new ideas is far better than one librarian saying that we will now do things like this.

Most academic libraries endeavor to embrace and utilize web 2.0 to create:

Communities

Through the use of technologies like Facebook. They have links on their pages which allow users to navigate freely to their website and at the same time it provides a platform for discussion and sharing of information. Other libraries have included a link for comments on their websites to allow users to provide additional information. http://library.ku.ac.ke/

The use of Google maps to enable users to locate libraries especially libraries with campuses can use this tool to bring a users to the libraries. http://www.anu.ac.ke/pages/grace-roles-library/

Content

Nelson (2010) explains that content is king. Users need to feel confident when locating information. Libraries can have videos to encourage users to use their libraries in a series of short video clips; these videos can be uploaded to YouTube or the library's websites. Ensuring that once users locate information effectively is only one step, providing skills that enable users to think critically and to use information literacy skills to effectively evaluate the content is an avenue that even a University library should pursue, especially for students new to studying or research. Therefore providing links to information skill processes would be worthwhile.

Conversations

Jean-Paul (2011) discusses the critical factor of conversation being the best way to communicate with other people. Libraries can converse through video clips (although this is a one way conversation). Some other libraries encourage conversation through comments on Facebook.

https://www.facebook.com/pages/Kenyatta-University-Library/239904162689026

https://www.facebook.com/pages/St-Pauls-University-Kenya/273357939376563

https://www.facebook.com/anu.ac.ke

https://www.facebook.com/pages/Strathmore-University-Library/152833268081020

Conversion.

It is important for library users to be converted to the library. They need to feel confident that their information needs can be fulfilled through the library. RSS feeds from the website will bring new information directly to the user. This is important as the user can then feel confident that when their information becomes available, then they will be the first to know and they can then retrieve and use this information whether it be a book fed through the RSS feeds on the OPAC or an online resource that has been updated on the libraries database.

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Way forward

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Provide information in as many formats as possible: students are accessing information using a variety of media such as video, podcasts and vodcasts rather than through the traditional channels of reading books or newspapers. Libraries should develop tutorials, videos and upload them on the library webpages or make use of YouTube, Slideshare. This can be done for orientation, guides to e-resources, guide to use of Library Management System (LMS), information literacy.

Make library webpages and content "GYM-enabled" that is, optimized so that it is findable by Google, Yahoo, Bing and MSN. This way the library will continue to maintain its relevance to the general public. Installation of 'add-ons' like LibX toolbar enables users to search the library database like Google search. Develop subject guides to allow for federated searching of e-resources.

Rather than simply have social networking sites like facebook, exploit on the ever evolving features of the sites. For example, facebook in May 2007 launched a platform that allows users create applications. For instance a search feature for a library catalog.

This application is fairly simple for libraries to create since some of the users have willingly shared the code with others wanting to do something similar. Other features include creation of groups that facebook users can join. Messages can be send to all group members in order to advertise library programs, and services. Ability to create a page and when users subscribe to the page they get updates in their profile news feed is another useful feature. In addition to these options, the librarians can make use of the profile wall to answer questions, post items to talk about, albums to share pictures of library events and share scheduled event like workshops, training or library classes.

Conclusion

Today's library user wants answers and he wants them now, in the most convenient manner to him. Unfortunately the reality is that more than 90 percent of students they want to find out about something, the first thing they would do would be to ''Google'' it. No one would think about asking a reference librarian or even logging onto a library website to use the inquiry service. This is the new marketplace; this is where most people live and work. Thus as libraries, we must recognize that the Internet and search engines are now the main ways in which people look for information. Rather than try to change users' habits, the library can change its approach and meet users where they are; on the Web, using the tools they enjoy using.

In summary, to libraries, Web 2.0 may be nothing more than just new tools of technology. However, how we use these tools and what we use them for will determine whether libraries can survive this new E-volution.

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