



Using Web 2.0 technologies to build communities: a Caribbean context and historical perspective

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Abstract:

In the last decade or so there has been an explosion in what has become known as 'Web 2.0'. The new and emerging technologies that form this Web 2.0 revolution have presented a number of tools that are easy to use and have the potential to impact libraries and librarianship in the Caribbean in a profound way. This paper examines a few of these Web 2.0 technologies and tools and illustrates how some of them are being used by Caribbean information professionals to overcome several of the challenges which are experienced in the region. These challenges include limited finances, geographical dispersal and dissemination of information amongst and within the islands to build and strengthen communities.

The paper acknowledges that while there have been some efforts in the use of Web 2.0 more needs to be done so that libraries and librarians in the region are not left behind as the rest of the developed world fully embraces the technology and races towards the newer 'Web 3.0'. It concludes by calling on Caribbean library and information professionals to take advantage of these technologies to become more relevant to their users, to guard against stagnation but rather to ensure the growth of the profession.

Introduction

There is a very popular phrase which says – adapt or die. This saying holds a message for libraries. The world that many of us started in as librarians has changed, perhaps forever, and we need to change too if libraries are to survive. I believe that Web 2.0 technologies, rather than being a threat to the existence of libraries, can be a community building asset, especially in areas such as the Caribbean.

1. The Caribbean geo/political space

The Caribbean is generally acknowledged to be the island archipelago stretching from the south-eastern tip of the United States of America to the north-eastern tip of South America. The group of islands includes the Bahamas, Cuba and the Cayman Islands in the north; Trinidad and Tobago in the south; Aruba, Bonaire and Curacao in the west, and Barbados the most easterly of the islands. The Caribbean also tends to refer to those territories 'washed' by the Caribbean Sea, such as Guyana in the south and Belize in the west. These territories vary in size from Hispaniola with hundreds of thousands of acres to Barbuda with a few hundred acres. The territories within this chain tend to share not only a geographical space but the historical legacy of the transatlantic slave trade. As such a number of languages are represented within the region – Dutch, English, French and Spanish – along with a number of creoles.

Figure 1. The Caribbean



source: <http://www.caribbean.com.au/>

This geographical dispersal and linguistic disparity can at times create barriers to communication and collaboration among the island nations.

2. Libraries and librarianship in the Caribbean context

The Caribbean has a long history of library use. The earliest libraries in the English-speaking Caribbean emerged after the end of the slave trade. These started as subscription libraries and then became public libraries. According to Beverley Hinds¹

¹ Beverley Hinds, "Historicising the Carnegie Free Library: The Case of Barbados." *World Libraries* 18.1 (2010)
<http://www.worlib.org/vol18no1/index.shtml> (Accessed May 10 2011).

As in the British-owned territories, subscription libraries were the forerunners of public libraries in the English-speaking Caribbean. These institutions had emerged in the late eighteenth century and like their British counterparts catered only to the elite members of the society who could afford the fees... In July 1847, an act to establish a public library was passed in Grenada; St. Lucia in June 1847; Barbados on 21 October of the same year; and St. Vincent and the Grenadines much later in 1893. When the laws came into effect, existing libraries voluntarily handed over their books to the agencies concerned. For example, in Barbados the Literary Society and the Library Association merged in 1847 and become the Barbados Public Library; in Antigua, the Library Society became the Public Library of Antigua. In July 1847, an act to establish a public library was passed in Grenada; St. Lucia in June 1847; Barbados on 21 October of the same year; and St. Vincent and the Grenadines much later in 1893.

Several of these libraries were built through the generosity of American philanthropist Andrew Carnegie.

In contrast, academic libraries have a later history. Willamae M. Johnson notes that within the English-speaking Caribbean, Codrington College was the only higher education institution in the region from its establishment in 1743 until 1921 when the Imperial College of Tropical Agriculture was established in Trinidad and Tobago.²

The University of the West Indies, then known as the University College of the West Indies, was established in Jamaica in 1948. Within a short space of time, largely due to many territories achieving independence, some 75 institutions of higher education sprang up around the region – and with them came libraries to complement their teaching and learning activities.³

3. Historical perspective

Since their establishment, regional libraries have faced a number of challenges which have prevented them from reaching their full potential. Two of these challenges are particularly noteworthy.

Budgetary challenges have been a constant fact for all regional libraries at all levels, as Gwyneth E. George notes:

The inability to access funds from donor agencies and the low priority given to libraries in governments' budgets also continue to be serious problems ...

² Willamae M. Johnson, "Broadening the Academy's Influence: A Glance at Two Academic Libraries in the Caribbean." *Caribbean Libraries in the 21st Century: Changes, Challenges, and Choices*. Ed. Cheryl Peltier-Davis and Shamin Renwick. New Jersey: Information Today, 2001. 42-43..

³ Willamae M. Johnson, 42-43.

According to Ferguson, 'we must convince governments that improvement in access to information for Caribbean peoples is as important as improvements to roads, transportation and educational facilities'.⁴

Inadequate financing takes a toll on collection development strategies, the growth of library facilities, staffing, and the possibility of professional development and outreach activities. In the case of training, it's not just the cost of the training programme itself, but the prohibitive cost of travel and accommodation among some of the world's most popular tourist destinations. These external factors recently prevented a member of the *Caribbean Librarians* Group from attending a training programme that was critical to the library's development despite the fact that the course was taking place in the Caribbean.

Intra-regional communication can also be a challenge. Not only is distance a factor, but also the historical and continuing prominence given to the oral tradition. That means that information about what is happening in libraries in various territories rarely reaches other territories. Davis and Renwick commented on this fact.

Records of the challenges faced, the solutions attempted, or even the accomplishments achieved by Caribbean librarians are not easily available as there is a dearth of library literature emanating from the region.⁵

As a result, many of the developmental activities for regional libraries and librarians are confined to the territories where they originate. And within the larger territories, even internal dissemination may be patchy.

Alma Jordan, in her 1973 article⁶, states that regional cooperation among libraries (with the establishment of the Eastern Caribbean Regional Library in 1948) preceded the establishment of political initiatives such as the West Indies Federation. She notes however that, like the continued attempts at political cooperation, "inter-library cooperation in the Caribbean has travelled a long and winding road."⁷ She continues that there have been many "tracks and by-

⁴ Gwyneth E. George, "The Impact of Modern Information Technology in the Caribbean: Exploring the Challenges for the Technical Services Division." *Caribbean Libraries in the 21st Century: Changes, Challenges, and Choices*. Ed. Cheryl Peltier-Davis and Shamin Renwick. New Jersey: Information Today, 2007. 183.

⁵ Cheryl Peltier-Davis and Shamin Renwick, Foreword. *Caribbean Libraries in the 21st Century: Changes, Challenges, and Choices*. Ed. Cheryl Peltier-Davis and Shamin Renwick. New Jersey: Information Today, 2007.xi.

⁶ Alma Jordan, "Library Cooperation in the West Indies." *Libri* 23.1 (1973): 18.

⁷ Alma Jordan, 18.

paths, dead ends and alley ways”⁸ which have caused the efforts to go off course. Alex Richards shares a similar perspective in his 1994 article.⁹ He posits

To speak of regional cooperation, of its difficulties, its successes, its prospects, is delicate, indeed, when one realizes that this job consists essentially in federating professional energies and initiatives around an idea unequally shared. ...Cooperation calls for action and requires from all share holders an engagement on objectives determined before hand which must go further than the agreement.

The challenges of library cooperation are evidently not new.

Another challenge is the brain drain where Caribbean trained librarians leave the region and the additional knowledge and experience they gain is lost to the region. Often these overseas based librarians are in possession of knowledge which could benefit the region but that information hardly finds its way back to the Caribbean.

4. Addressing the challenges

In the past, attempts to resolve these issues have proved unsustainable because of the extensive financial and human resources needed to make long term gains, as Gwyneth George points out above. Traditionally, these efforts have been time-consuming and have relied on the commitment and dedication of a small group of individuals.

I believe that Web 2.0 technologies offer the chance to solve some of these problems and create new opportunities for libraries in the 21st century. Web 2.0 technologies are designed to connect people despite location and to provide a sense of community without the need of a physical presence. They also allow for the ebb and flow of information between users in a multi-node communication channel. This means that the disadvantages of distance and isolation are overcome automatically. Also, there is no need to be online for a set time to achieve results. Web 2.0 technologies require less time and fewer resources than other efforts tried in the past and they offer a significantly greater potential return. They offer the possibility of creating cohesion and collaboration both within and outside the region.

5. Web 2.0 technologies -

Let us consider these Web 2.0 technologies in more detail to understand their characteristics and functions.

⁸ Alma Jordan, 18.

⁹ Alex Richards, "Library Cooperation for Social and Cultural Development Within the Caribbean Area." 60th IFLA General Conference - Conference Proceedings - August 21-27, 1994. <http://archive.ifla.org/IV/ifla60/60-rica.htm> (Accessed May 10, 2011)

Definitions

The term “Web 2.0” is widely attributed to Tim O’Reilly¹⁰ though other people have been credited with its first use. O’Reilly is said to have coined the term and offers the most comprehensive and perhaps confounding definition of this phenomenon. According to him,

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation," and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.¹¹

This cumbersome definition has fortunately been dissected by a number of other persons who provide more manageable and understandable definitions of the term.

SEOMoz’s Web 2.0 Awards Zeitgeist¹² states that, inter alia, Web 2.0 demonstrates the following characteristics:

- User generated and/or user influenced content
- Applications that use the Web (versus the desktop) as a platform, in innovative ways
- Similar visual design and shared functional languages
- Leveraging of popular trends, including blogging, social tagging, wikis, and peer-to-peer sharing
- Inclusion of emerging web technologies like Really Simple Syndication (RSS), Asynchronous JavaScript and XML (AJAX) programming, Application Programming Interfaces (APIs)...
- Open source or sharable/editable frameworks in the form of user-oriented “create your own” APIs

Essentially web 2.0 relates to how the software and hardware can be “manipulated” to enhance the user experience. The focus shifts from a systems oriented model to a user-centric

¹⁰ Other persons associated with the coining of the term are Dale Dougherty and John Battelle.

¹¹ Tim O’Reilly, “Web 2.0: Compact Definition?” *O’Reilly Radar* 2005. <http://radar.oreilly.com/archives/2005/09/30/what-is-web-20.html> (Accessed May 10 2011).

¹² SEOMoz’s Web 2.0 Awards Zeitgeist. <http://www.seomoz.org/web2.0/zeitgeist#what> (Accessed May 10 2011).

one. This model, a departure from the traditional library/place centric model, allows the user more input into the systems with which he interacts.

There can be no discussion about Web 2.0 without acknowledging that there is some debate over the concept and term.¹³ Tim Berners-Lee, the inventor of the World Wide Web is one person who disagrees with the Web 2.0 'hype'. He made his position clear in a 2006 interview.

Web 1.0 was all about connecting people. It was an interactive space, and I think Web 2.0 is of course a piece of jargon, nobody even knows what it means. If Web 2.0 for you is blogs and wikis, then that is people to people. But that was what the Web was supposed to be all along.... The idea of the Web as interaction between people is really what the Web is. That was what it was designed to be as a collaborative space where people can interact.¹⁴

While Berners-Lee does not endorse Web 2.0, he emphasises what he considers to be the latent potential of Web 1.0. He notes that the collaborative nature of the Web was always present; and it is this ideal upon which Web 2.0 builds.

¹³ Tim Berners-Lee and John Dvorak are a few who have questioned the Web 2.0 term.

¹⁴ Tim Berners-Lee, "Interview with Scott Laningham." IBM DeveloperWorks. IBM, August 22, 2006.
<http://www.128.ibm.com/developerworks/podcast/dwi/cm-int082206.html>.
(Accessed May 10 2011)

Figure 2. Web 1.0 versus Web 2.0

Web 1.0	Web 2.0
"the mostly read only web"	"the wildly read-write web"
45 million global users (1996)	1 billion+ global users (2006)
focused on companies	focused on communities
home pages	blogs
owning content	sharing content
Britannica Online	Wikipedia
HTML, portals	XML, RSS
web forms	web applications
directories (taxonomy)	tagging ("folksonomy")
Netscape	Google
pages views	cost per click
advertising	word of mouth

Source: <http://www.labnol.org/internet/web-3-concepts-explained/8908/>

Essentially, then, Web 2.0 is not a new version of the internet, neither a new internet standard nor a specific application or system. It is an attempt to get a grip on, harness or perhaps more precisely to consolidate into an umbrella term, the exponential changes which are being brought to bear on society through the worldwide web.

The collaborative and community oriented nature of Web 2.0 are widely expressed through the following tools:

Blogs

Among the more popular manifestations of the Web 2.0 technologies is the blog. The name is a contraction of the words 'web' and 'log' – 'blog'. From this we get blogger (web logger), a person who writes blogs. Blogs have been in existence since the early 1990s and the number of bloggers, posts and commentators has increased exponentially. In 2004, premier blog search engine Technorati was tracking around 4 million blogs.¹⁵ In 2010, Blog Pulse estimated that number at 126 million.¹⁶

¹⁵ David Sifry's musings. Blog. "State of the Blogosphere, October 2004" October 10 2004.
<http://www.sifry.com/alerts/archives/000245.html> (Accessed May 10 2011)

¹⁶ Royal Pingdom. Blog "Internet 2009 in numbers" Jan 22, 2010.
<http://royal.pingdom.com/2010/01/22/internet-2009-in-numbers/> Accessed May 10 2011)

Traditionally, blogs have been defined as online personal journals but this definition does not acknowledge that blogs may be personal, institutional, cooperative, and collaborative. For our purposes a blog is defined as “a frequently updated website consisting of dated entries arranged in reverse chronological order so that the most recent post appears first”¹⁷. These are some general characteristics of a blog:

- short for weblog; blog is a journal (or newsletter) that is frequently updated and intended for general public consumption
- consists of text and images and can appear in a calendar type format.
- a virtual diary created by individuals, groups or organizations and stored on the Internet.

Blogs have appealed widely to libraries and information professionals.

Social Networks

Social networks are not new, though online social networking has magnified the concept and grown tremendously over the last few years. The younger generations, the Generation Xers and Yers or Millennials as they are also called, have taken to social networking sites like Facebook and MySpace to such an extent that older generations are unable to understand the appeal.

Online social networks manifest these characteristics

- a personal or professional set of relationships between individuals
- represent both a collection of ties between people and the strength of those ties
- a web of interconnected people who directly or indirectly interact with or influence individuals and or groups - friends, neighbours, community contacts, and professional support
- a map of the relationships between individuals

Libraries have been making extensive use of these social networking sites to reach their current and prospective users.

Communication Tools

In addition to blogs and social networking sites, online users have moved beyond email to communicate with their peers and colleagues via a range of synchronous and asynchronous communication tools. Users are able to do a number of things within the same programmes – make and receive calls, send instant messages, send pictures and files, make video and conference calls. Tools like Skype, instant messaging software (Google Talk, AIM, MSN Live), online groups such as Google Groups have significantly altered the way we communicate with each other. Angela Costrini Hariche, et. al observe:

¹⁷ Jill Walker as qtd. by Meredith G. Farkas. *Social Software in Libraries: Building Collaboration, Communication, and Community Online*. (Medford, NJ: Information Today, 2007). 12.

In the era of Web 2.0 and with widespread access to internet, the global village makes use of real-time communication technology to interact with countless audiences and individuals across the globe.¹⁸

Additionally these communication tools facilitate multimedia and multi-content communication while enabling wider, easier global access.

Other Technologies

While this paper focuses on blogs, social networking and communications tools there are dozens of other online resources in use both in libraries and elsewhere. These include media organising, virtual worlds, gaming, mashups, podcasting, wikis and NextGen catalogues.

Library 2.0

Web 2.0 has given rise to the Library 2.0. The latter is a term which first appeared in librarian Michael Casey's blog, *LibraryCrunch*. Casey provides an extensive discussion on this in a 2006 *Library Journal* article¹⁹. Like Web 2.0, Library 2.0 is not without its critics. Walt Crawford provides a comprehensive synthesis of the various perspectives in his 2006 article²⁰.

As with Web 2.0, Library 2.0 is based on a user-centric model which takes prominence.

Library 2.0

- is user-centred change
- invites user participation in the creation of both the physical and the virtual services
- attempts to reach new users and better serve current ones through improved customer-driven offerings
- is cumulative – each component is a step toward better serving users
- a model for library service that encourages constant and purposeful change

¹⁸ Hariche, Angela Costrini, Estelle Loiseau and Ronan Mac Erlaine, *Web-Enabled Social Cohesion: Harnessing Participation*. Paris: OECD Development Centre, [2011]. <http://www.oecd.org/dataoecd/6/53/46908804.pdf> (Accessed May 10 2011)

¹⁹ See Casey's definition in "Library 2.0." *Library Journal*. 131.14 (2006): 40-42. <http://www.libraryjournal.com/article/CA6365200.html> (Accessed May 10 2011) Other definitions are offered by Ken Chad and Paul Miller (2005) and Jack Maness (2006)

²⁰ Consider the Walt Crawford synthesis of the various perspectives in the online journal *Cites & Insights*. "Library 2.0 and 'Library 2.0'." *Cites & Insights: Crawford at Large*. 6.2 (2006). <http://citesandinsights.info/v6i2a.htm> (Accessed May 10 2011)

Four of the five characteristics in the foregoing list specifically speak to user engagement. With this Library 2.0 model traditional operational systems are evolving to meet the users' needs through greater user input. The Library 2.0 model embraces and constantly affirms the need for innovation. The concept of Library 2.0 embodies many of the characteristics articulated by the Web 2.0 thrust and aligns libraries directly with these technologies.

6. Web 2.0 in the Caribbean context

Let us now turn to the use of Web 2.0 and Library 2.0 in the Caribbean context. Some libraries and information professionals are already using these technologies to build communities. They have provided libraries and librarians with powerful new tools. Here are some of the ways that they are being used in the Caribbean.

Blogging

Blogs have been used successfully by Caribbean information professionals to address some of the historical challenges of disseminating knowledge and resources.

The ACURIL CyberNotes BLOG is the blog of the region-wide library association, ACURIL – the Association of Caribbean University, Research and Institutional Libraries. The association is using a blog as an outreach tool to keep its constituents abreast of happenings within the organisation. This is an example of disseminating information to other parts of the Caribbean. In addition, since blogs facilitate commentary, feedback from the region can be had almost instantaneously.

Mark-Shane Scale, a lecturer at the DLIS at UWI, Mona, is the author of *CARIBLIN – Caribbean Library and Information News*. This blog culls and presents information pertinent to library and information professionals from various sources across the region and successfully disseminates information around the region from a base in Jamaica.

Finally *Caribbean Connector*, run by Cheryl Peltier-Davis, a Trinidadian living in the US, aims to connect librarians in the region with information which is relevant to them. This addresses the historical inability to access relevant information from around the globe.

While those examples are blogs geared towards other professionals, blogs have been and continue to be used by libraries to transmit information to their users and the wider community. Examples of other Caribbean blogs providing this service are the Anne Ross Library blog in St. Kitts and Nevis, the Special Collections blog at UWI, St Augustine and the UWI, Mona library news blog.

Social Networks

One Caribbean library is successfully using Facebook for outreach. Facebook is one of the most popular social networking sites with more than 400 million users. It transcends age, geographical and other barriers to bring users together.

Librarian Carl Adamson initiated and led the project to get the Tamarind Hall Branch of the Barbados National Library Service on *Facebook*. Through this forum the Tamarind Hall Branch has been able to inform users of the services and events being offered by the library.

Notices and announcements are posted on Facebook and the Library also produces an electronic newsletter which is publicised on their page.

The Library uses the photo album feature on Facebook to post and share photographs of the displays it hosts. These displays, along with the additional information, thus reach a wider community.

While not the first library in Barbados to have a Facebook page the Tamarind Hall Branch has consistently and actively used the platform to gain visibility within and outside of the rural parish of St. Joseph.

While much of the content for the page is sourced internationally, a good direction for the future would be to increase the posting of more local information related to libraries, reading and so on.

Communication Tools

The Systems Units at the four Campuses of The University of the West Indies located at Cave Hill in Barbados, Mona in Jamaica and St. Augustine in Trinidad and Tobago, are using Skype to communicate with each other and the vendor Exlibris during this phase of the implementation of the upgrade of the Integrated Library System – ALEPH. The use of Skype allows the members of the implementation teams across and between the campuses to communicate by voice and instant messaging, share documents and their desktops and generally discuss the issues impacting the various campuses.

The use of Skype for this project also enables the organisation to save a tremendous amount of money in telecommunication charges as the teams communicate with each other several times a week. Calls and messages among Skype users are free, enabling communication without the traditional worry about cost.

Skype is also used to host conferences with the vendor thus also reducing the cost in terms of finance and human resources associated with bringing the vendor to multiple locations.

The features inherent in the software have proven to be convenient for the team as the challenge of arranging the schedules of the personnel on the four campuses so that they may all be in the same physical space at the same time for discussions is reduced. While it is noted that at times the quality of the communication can be inconsistent, the use of Skype has facilitated the progress of the implementation project.

Google Groups

The Google Group *Caribbean Librarians* was created almost a year ago. Montserratian Gracelyn Cassell wanted to create a forum for librarians from the Caribbean, regardless of the type of library in which they work and regardless of their geographical location. The initial idea was to create a listserv for the regional librarians. However the costs associated with acquiring the software, the need for dedicated server space to house the list made this an expensive and therefore an unfeasible option.

Google groups was then investigated and chosen as the platform upon which to create the forum which would allow Caribbean librarians to share common interests, discuss issues impacting their careers and librarianship in the region as well as provide an avenue to

network and tap the enormous amount of institutional (un-documented) knowledge and resources available in the region.

Thus far Google Groups has successfully facilitated Cassell's vision. As administrator of this group I have found this software easy to understand and navigate. Though only the basic features are currently being used the software provides several other functionalities which will be explored as the group grows and the needs become more sophisticated.

These examples of good practice only scratch the surface of what is possible for Library 2.0. Like other information professionals around the world, Caribbean librarians and their libraries need to adapt and embrace these technologies.

7. The future of libraries

So what is next for Caribbean libraries, information centres and information professionals in this Web 2.0 world? Let us consider this question by examining the following:

- Death of libraries and information centres
- Re-education of personnel and users
- Opportunities for change and development
- Web 3.0

Death of Libraries and Information Centres

With the arrival of new technologies, new trends, there is usually an outcry about the impact on libraries. Usually the pronouncement is the demise of libraries.^{21 22} The introduction of computers in libraries, Google (and the Google digitization project) and digital libraries are just a few examples of the changes which have spelt the death of libraries²³.

²¹ Consider the following articles: Marc Meyer Direct Marketing Observations. Blog. Death of The Library and rise of the Kindle Jan. 18, 2008. <http://directmarketingobservations.com/2008/01/18/death-of-the-library-and-rise-of-the-kindle/> (Accessed May 10 2011)

²² Deliah Lloyd, Woman Up. Blog. "The Death of the Library: Read It and Weep" June 5, 2010. <http://www.politicsdaily.com/2010/06/05/the-death-of-the-library-read-it-and-weep/> (Accessed May 10 2011)

²³ Consider Walt Crawford's "Book Searching: OCA/GBS Update"
Cites & Insights: Crawford at Large, Volume 7, Number 1, Whole Issue 85
<http://citesandinsights.info/v7i1b.htm> (Accessed May 10 2011)

I propose a different type of death for libraries in the Caribbean. Many of our systems in the Caribbean rely heavily on a paradigm which centres the library as the point of focus. A transformation needs to take place for us to remain relevant, respond proactively and satisfy the information needs of our users. If libraries themselves are not to die, we must accept that with the widespread introduction of Web 2.0 technologies in the Caribbean, our traditional perception of libraries, library workers, users and how information is accessed must die. We need to embrace the new user-centred models being promoted so that we can provide value added services. This leads me to the next point.

Re-education of Personnel and Users

In order for the new paradigm to be truly effective, there needs to be a radical re-education of both users and library personnel. Library personnel must refocus the vision of what the library is and how it functions. They must be willing to learn about and adapt to these Web 2.0 technologies for use in our libraries. This will call for a complete re-evaluation of what we do and how we do it and a commitment to lifelong learning.

As a result, we can expect to see changes in job titles and descriptions. In most libraries in the Caribbean, there are few specialised positions; most persons work as generalists. However, particularly in the North-American context we have seen the emergence of some intriguing job descriptions and titles as a result of the incorporation of Web 2.0 technologies in libraries. There have been vacancy announcements for an Emerging Technologies Librarian, a NextGen Librarian, a User Experience Librarian and a Librarian 2.0.²⁴ Basically this type of librarian is responsible for keeping up to date, experimenting with and implementing new technologies/Web 2.0 in the library. The individual is charged with the responsibility of creating and maintaining the Library 2.0.

Our users are already using Web 2.0 technologies outside of the library setting. They are completely wired and constantly connected via laptops and smart phones. They therefore are internet savvy and rely more and more on non traditional sources of information. The physical library is no longer a critical space for them as they prefer the online environment. However, users need to be educated about how these emerging technologies are applicable to and applied in libraries, the range of services available to them via these means and how the library can operate within their preferred sphere to assist them. As they become more aware of and experience more of these Library 2.0 services, they will propel the Caribbean library environment to re-evaluate its presence (both physical and virtual) and its services to better serve them.

The next generation of library assistants will come from this group of technologically savvy web users. My goal is to show them how the technologies that they are in the habit of using socially can be used to create a richer, more user centred library experience for both users and information professionals. To assist with this, I deliver a more comprehensive version of this presentation to the Library Assistant's programme at our local community college. By introducing these Web 2.0 concepts I hope to do my part in motivating them to commit to the profession and to enter the profession with the new user-centred model already being a part of their expectation.

²⁴ David Lee King. "More Cool-Sounding Librarian 2.0 Jobs"
<http://www.davidleeking.com/2006/03/17/more-cool-sounding-librarian-20-jobs/> (Accessed May 10 2011)

Opportunities for Change and Development

The Web 2.0 environment offers many opportunities for use of the technology to provide innovative and user-centred services to our tech-savvy users. It also lends itself to the development of the library and information services profession as we build upon, not completely eradicate, our foundations to adapt to the changing environment to meet our users' needs. This will make for a richer and ever evolving profession rather than a stagnant one.

With Web 2.0 technologies we can begin to expose our unique special collections to the wider world. Many of these are hidden away in rooms barely used by researchers. Can you imagine the potential use that could be had if we were to make the listings and some content of our West Indian collections available via the internet? If the Montserratian collection at the public library were available via the internet, I or any other researcher for that matter could perhaps have done much, if not most, of the research from home. The exposure would likely result in an increase in the number of research projects focused on the collection, which in turn would increase awareness of the island and perhaps even have an impact on the number of visitors to the island. Can you imagine the potential impact of us making wider use of these emerging technologies in the region?

Web 3.0

Berthamae L. Walker and Raynold K. Cartwright observe:

As we move further into the 21st century, Caribbean librarians ... must keep a finger on the pulse of our information and library users. If not, we are likely to lose them to other institutions and places within the region and the world.²⁵

Internationally, particularly in North America, there is already a move towards Web 3.0 even though Caribbean libraries and information professionals have not yet embraced the Web 2.0 concept. Web 3.0 is anticipated to be a totally integrated user experience seeing a convergence of the virtual and physical worlds and the explosion of the semantic web.²⁶ The chart below illustrates the difference among the three stages of web technology.

²⁵ Berthamae L. Walker and Raynold K. Cartwright, "Library Use in Academia: A Bahamian Perspective." *Caribbean Libraries in the 21st Century: Changes, Challenges, and Choices*. Ed. Cheryl Peltier-Davis and Shamin Renwick. New Jersey: Information Today, 2007. 285-6.

²⁶ Jonathan Strickland, "How Web 3.0 Will Work" How Stuff Works. <http://computer.howstuffworks.com/web-30.htm> (Accessed May 10 2011)

Figure 3. Web 1.0 versus Web 2.0 versus Web 3.0

Web 1.0	Web 2.0	Web 3.0
"the mostly read only web"	"the wildly read-write web"	"the portable personal web"
45 million global users (1996)	1 billion+ global users (2006)	focused on the individual
focused on companies	focused on communities	lifestream
home pages	blogs	consolidating dynamic content
owning content	sharing content	the semantic web
Britannica Online	Wikipedia	widgets, drag & drop mashups
HTML, portals	XML, RSS	user behavior ("me-onomy")
web forms	web applications	iGoogle, NetVibes
directories (taxonomy)	tagging ("folksonomy")	user engagement
Netscape	Google	advertainment
pages views	cost per click	
advertising	word of mouth	

Source: <http://www.labnol.org/internet/web-3-concepts-explained/8908/>

Since our libraries and information professions in the Caribbean have been slow on the up take of Web 2.0, unfortunately it will be some time before Web 3.0 becomes a reality for us.

8. Recommendations for the future/ conclusion

Conclusion

While I have presented mostly the positive elements of the Web 2.0 phenomenon, I am not unaware of the challenges which introducing and actively pursuing Web 2.0/Library 2.0 would pose. The costs of keeping up to date with the technologies, learning the emerging technologies, training others, and maintaining the services would be important considerations. The time needed for the task also merits enormous consideration.

Notwithstanding these factors, the central question is whether or not libraries and information professionals in the Caribbean can remain obtuse and or ignorant to the potential that these emerging technologies can provide. Granted there has been some exploration of the use of the Web 2.0 technologies available however these forays are not nearly sufficient.

Faced with the choice of adapting to the rapidly changing Web 2.0 environment or maintaining the status quo, it should not be a difficult decision for libraries and information professionals to make. It is important that libraries and information professionals understand the potential of Web 2.0 and take advantage of the opportunities available through use of this technology to provide innovative and user-centred services to the new wired tech-savvy information users. As the saying goes, we need to adapt or die.

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