

Web 2.0 use, challenges and opportunities in the library: The Philippine Context

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Abstract: The need for a 21st century academic library to integrate Web 2.0 technologies in its services is crucial if it intends to remain relevant amidst the changing needs and preferences of library users. Assessing how Philippine libraries utilize Web 2.0 tools helps understand the challenge affecting the use and none use of these tools, as well as untapped opportunities for successful integration. An online survey involving 57 libraries revealed very limited use of Web 2.0 tools, with social media as the lone preferred Web 2.0 platform for many libraries. A focus group discussion participated by 17 academic librarians revealed common challenges, such as lack of personnel, lack of familiarity on many Web 2.0 tools, lack of training, poor internet connection, and limited skills. On the positive side, the librarians have shown interest to use other Web 2.0 tools and perceived Web 2.0 as useful tools. Support from school administration and funding was underscored an enabling factor in Web 2.0 integration.

Keywords: Web 2.0, Technology, Integration

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INTRODUCTION

To address the demands of today's competitive information exchange and sharing activities brought about by the development in the World Wide Web, librarians are taking advantage of emerging technologies to change the platform of information sharing. Web 2.0 has been considered one of the crucial tools that enable libraries to adapt into the digital environment. As a tool for interaction and collaboration the social media dialog, the growth of Web 2.0 also highlights the rise of social media (O'Reilly, 2005) as a tool for empowering users as active participants in collaboration and information dissemination (Beale, 2014). With its widespread use in the mainstream, Web 2.0 has become influential than ever in terms of search rankings, thus, expanding and enhancing the library's your social media presence can significantly amplify your reach and rate of lead generation .

The application of Web 2.0 in the libraries has significantly revolutionized librarianship, which aims to empower users and offer them services at their convenience (Khiwa, 2010). The need to integrate Web 2.0 services in the library has, thus, become vital. Accrediting agencies in the Philippines require libraries to acquire non-print, digital and electronic resources. Libraries also need functional and dynamic Web page, not to mention the need for an interactive library system. It is, however, observed that traditional librarians (those who barely used the Internet and do not have Web 2.0 account) always complain about the delay of receiving communications through snail mail. The adoption of Web 2.0 could help minimize these problems and build meaningful interactions with stakeholders, thus, keeping libraries and librarians relevant to the academic community (McManus, 2009).

According to Lapuz (2009), it is the duty of librarians as information professionals to introduce and spearhead the use of new tools in the development and enhancement of

information literacy teaching aimed at educating users of information, particularly in enhancing reference (Ramos and Abrigo, 2011) and other library services. The increasing demand for a technologically-competent librarian, therefore, calls for the need to equip with the necessary technical competencies (Yap, 2012) and upgrade librarian's basic skills not only for professional growth but also for self-fulfillment.

Opportunities for librarians to catch up with the trend are available. Various professional librarian's organizations (Philippine Librarians Association, Inc., Philippine Association for Academic/Research Libraries, etc.), as well as government agencies and publishing companies are offering trainings to librarians aimed at developing proficiency in using information and communications technology. Familiarity is where it all begins to open possibilities of delivering information, engaging users to connect in meaningful ways and providing a wider venue for intellectual discussion to flourish.

Objectives of the Study

Considering that Web 2.0 is integral in easing the delivery and exchange of services, this study was conducted to analyze the potentials of integrating Web 2.0 in the libraries. Specifically, this study aimed to:

1. Find out the Web 2.0 tools utilized by the libraries;
2. Ascertain the challenges encountered in using Web 2.0 tools; and
3. Explore opportunities towards the integration of Web 2.0 in the library.

REVIEW OF RELATED LITERATURE

Web 2.0

Web 2.0 is described as the next incarnation of the World Wide Web, where digital tools allow users to create, change, and publish dynamic content of all kinds (Stephens and Collins, 2007). It is a term that refers to different websites and applications that allow an individual to create and share information or materials, collaborate and communicate in an online platform. The difference of Web 2.0 from other types of online platforms is that users do not need to have in-depth web design or publishing skills to participate since Web 2.0 applications are user-friendly, with features and applications that enable users to locate and assemble content that address their needs. It frees users from the need to conform to the paths laid by content owners or their intermediaries (Singh, Shukla and Hariom, 2012).

The basic qualities of Web 2.0 include the push for the freeing of data, the building of virtual applications, active user participation, end-user design, modularity, ease of sharing, communicating, remixing, and intelligence in design, long tail design, and trust (Miller and Mehringer, 2005). If Web 1.0 (the predecessor of Web 2.0) is a read-only medium, Web 2.0 is a read-and-write medium. From a static, one-way platform to Web 2.0, the emphasis on user participation characterizes the definition of Web 2.0 offered by most commentators and advocates as well (Tiwari, Sharma and Tiwari, 2012). In the Web 2.0 environs, communication involved user participation, discussion and feedback. Everyone can create content, ideas and knowledge flow freely and are remixed and reused.

Web 2.0 Technologies

Blog

The word blog is a contraction of the term weblog. It is a type of website, usually maintained by an individual who regularly enters commentary, descriptions of events, or other material such as graphics or video (Hodges and Repman, 2011). It is updated

frequently, dated, arranged in reversed chronological order. A blog is maintained with varied and unlimited information depending on the purpose and nature of the blog (Singh, Shukla and Hariom, 2012). Blogs are created to give a “what’s new” style site for users to market new materials and resources, events, and to share information. With open comments, the blogs create conversation within the community as a meeting place for discussion (Stephens and Collins, 2007).

Really Simple Syndication or Rich Site Summary (RSS)

RSS is a technology which has brought about significant advances in the fundamental architecture of the web (Majhi and Maharana, 2012). RSS serves to feed new materials, blog posts, and event information to readers, providing library users with the ability to customize catalog searches and subscribe to them to monitor new catalog additions and news from the library (Stephens and Collins, 2007).

Podcast

Podcast is a digital recording that can be downloaded to a computer or some other device (Hodges and Repman, 2011). Podcasts are used for promotional recordings about an organization’s services and programs. For the library, podcasts can be used for book reviews of all ages, speeches by visiting authors, children’s story, book club promotions, highlight new resources, and spread library information, such as the monthly podcast series of the organization (Stephens and Collins, 2007).

Wikis

Wikis are built to annotate online and print resources, allowing easy access to information, discussion and addition of information (Stephens and Collins, 2007). Wikis enable users to create and edit the content freely, although the information therein may have questionable reliability and authenticity. Wikis as library web platforms could facilitate in social interaction among librarians and the online user community, which could be archived for future reference (Singh, Shukla and Hariom, 2012).

Social Networking Sites (SNS)

Social networking sites are so far the most popular medium for publishing, sharing, communicating and disseminating of information enabling individuals to represent their social networks in a computer-mediated context, articulate their social networks or maintain connections with others (Kalbande and Golwal, 2012) These are the easiest media to reach out to people, interact with students, answer questions, and provide information about library and university services (Stephens and Collins, 2007). Among the different social networking sites, Facebook was found to be very effective in communicating, engaging and collaborating with users by sharing photos, latest news and events, announcement, latest updates, latest collections and many more (Awang and Abidin, 2013).

Streaming Media

Streaming of video and audio media could be taken advantage of in library instruction and orientation programs to be ran online, incorporating more interactive media-rich facets (Firke, Mukhyadal and Dakne, 2012). Among the most popular sites include Youtube and Vimeo.

Web 2.0 Use in Libraries

The benefits of using Web 2.0 in the library include enhanced library services (Tripathi and Kumar, 2010), social and academic purposes (Barnet, et al., 2010), such as online reference servicing, library news and events, and training services, among other. Web 2.0 also serves as a convenient platform to information patrons of new acquisitions and available resources (Wyatt and Hahn, 2011). Of these Web 2.0 tools, social media (Facebook and Twitter) remain as the most utilized Web 2.0 tool (Chu and Du, 2012; Awang and Abidin, 2006; Garroufallou and Charitopoulou, 2011; Barnet, et al., 2010; Chua and Go, 2010). Instant Messaging (Xu, et al., 2009; Tripathi and Kumar, 2010; Si, et al., 2010; Nesta and Mi, 2011), blog (Chew, 2009; Mahmood and Richardson, 2011), and wiki (Kim and Abbas, 2010) are also popular in the academic library setting. While many users prefer number of social networking sites (like Facebook and Youtube), this is also indicative of the limited variety of Web 2.0 tools that they use (Garroufallou and Charitopoulou, 2011; Nesta and Mi, 2011).

Various studies were reviewed on the extent of utilization of Web 2.0. In fact, the findings are mixed, with researchers reporting the prevalent use of Web 2.0 by librarians, teachers and students (Xu, et al., 2009; Tripathi and Kumar, 2010; Linh, 2008; Mahmood, 2009; Thorman, 2012; Han and Liu, 2010; Si, et al., 2011; Mahmood and Richardson, 2010) to low utilization, especially in developing countries where certain factors, such as lack of administration support and limited infrastructure as among the hindrances (Awang and Abidin, 2006; Barnet, et al., 2010; Garoufallou and Charitopoulou, 2011; Sarrafzadeh, Hazeri, and Alavi, 2011; Nesta and Mi, 2011). Low utilization may also stem from the fact that users only utilize Web 2.0 tools that may only positively impact their professional development (Anyaku, et al., 2012). Many libraries have shown positive perceptions on the usefulness of social networking tools, but the library staff are hesitancy and even the limited participation of users (i.e. students) were perceived to be hindrances (Chu and Du, 2012).

Interestingly, a preliminary study revealed that many academic librarians in Southeast Asia have not utilized Web 2.0 tools, including the Philippines, despite the fact that it has the highest number of academic institutions in the ASEAN region that offering library science programs. Five of the 17 university websites in Thailand have not adopted Web 2.0, while none has adopted in Brunei. Indonesia fared better with seven of the 11 university websites with Web 2.0 (Awang and Abidin, 2006).

Challenges in Integrating Web 2.0 in the Library

The integration of Web 2.0 brings unique challenges to librarians, administrators, and library users. Some of these challenges include technological constraints, accessibility, staffing, cost IP and copyright concerns, privacy and data retention, and impact on the culture and nature of the library (Zimmer, et al., 2010). Maintenance issues, too many social media features and tools to leave, low user interest, information security (Harnesk, 2010), difficulty in learning new tools and improving staff expertise, competing priorities, privacy concerns, (Bejune and Ronan, 2008), lack of user awareness and staff (Cao, 2009), doubtful quality of information (Chawner, 2008), increasing rate of change, possibility of identity theft, lack of peer-reviewed content and possibility of posting and offensive materials (Morris and Allen, 2008), are also among the challenges identified why many libraries still fail to adopt Web 2.0 tools.

Opportunities for Integrating Web 2.0 in the Library

The availability of IT infrastructure, internet connection and the increasing preference both of students and information professionals for work and study should be taken as a hint in integrating Web 2.0 in library operations (Rehman and Shafique, 2011). The

popularity of the social media, video streaming, wikis, and social tagging in the general public should also be considered by the librarians to come up with a plan on how to use these technologies and translate them in the context of library use (Chua and Go, 2010). Thus, identifying and recognizing how different Web 2.0 applications are used helps increase the level of user engagement. Academic librarian's ability to use Web 2.0 tools at work and for personal purposes makes them realize that Web 2.0 is a good and useful for the library services, thus, making it easier to integrate the tools in the library (Khiwa, 2010).

METHODOLOGY

This mixed method research involved desktop research and focus group discussion to gather the needed data for this study. The desktop research involved searching different Web 2.0 sites to check if each library in the island of Panay maintains an account or profile.

Panay Island has a total of 57 academic libraries, 37 are extension campus libraries and 7 are main campus libraries. There are also 13 lone-campus libraries. Libraries from state colleges and universities (SUC) dominate the number of academic libraries in the island. There are 46 SUC libraries, as compared to 11 private academic libraries. State universities and colleges in particular have more than one campus, which explains why the presence of extension campus libraries.

In terms of location, there are more academic libraries located in rural areas than those in the city. Thirty six of these libraries are located outside the city, while are 16 are spread in two cities. Four are located in the coastal areas and there is 1 library located in an island. This geographic distribution presents an implication on the availability and use of Web 2.0 tools in the library as institutions located in rural or remote areas are more likely to endure poor internet connectivity (Labucay, 2014), and limited access to Web 2.0 tools.

To determine the challenges and opportunities involved in the use of Web 2.0, 17 head librarians were invited to participate in the Focus Group discussion. A topic guide was designed to guide the researcher in the conduct of the FGD within the allotted time for each question/topic. Ideas/facts brought up during the discussions were recorded and thematically analyzed.

RESULTS AND DISCUSSION

Web 2.0 Use in Libraries

Table 1. Web 2.0 tools used by academic libraries in Panay Island.

Web 2.0 Tools	N	%
Social media	36	86%
Blog	6	14%
Streaming	0	0%
Photosharing	0	0%
RSS	0	0%
Podcasts	0	0%
Wiki	0	0%
Total	42	100%

The online survey conducted to determine what Web 2.0 tools are used by the different academic libraries in reveal that libraries are only limited to using social media and blogs (see Table 1). Of the 57 higher education libraries, there were only 36 that have social media accounts, representing about half of the total academic libraries in Panay Island. The choice for a social media channel was limited only to Facebook. Of these 36 social media handles, 31 are Facebook pages, while 5 are public profiles. These library FB pages represent a total of 26,517 followers as of December 2019, while the 5 FB library profiles have 2,896 friends. Apparently not all FB pages are updated.

In terms of blog utilization, only 6 libraries have blogs and only 3 are updated as of December 2019, while there was one blog that was setup but no content was found except the “About” page. These blogs are either subdomains of the university's website or hosted on free sites, like Blogspot and Wix. The regularly updated blogs feature library services and activities, latest acquisitions and featured books.

No library is using streaming site, photosharing tool, RSS, wiki and podcast. This presents an implication on the challenges encountered by the libraries in terms of staffing, librarian's web 2.0 skills, internet connectivity, IT infrastructure and the popularity of the tools in the region as discussed in the FGD.

The use of Facebook as the social lone social media tool reflects the overwhelming preference of the Filipinos to use the social media giant since 91.59 percent spend more time using Facebook than any other social media tool (StatCounter, 2020). Also, prior researchers indicate the preference of libraries to use social media (Facebook and Twitter) (Chu and Du, 2012; Awang and Abidin, 2006; Garroufallou and Charitopoulou, 2011; Barnet, et al., 2010; Chua and Go, 2010) compared to other Web 2.0 tools. In general, the none utilization of other Web 2.0 platforms corroborate the findings on the low utilization in certain developing countries (Awang and Abidin, 2006; Barnet, et al., 2010); Garoufallou and Charitopoulou, 2011; Sarrafzadeh, Hazeri and Alavi, 2011; Nesta and Mi , 2011). The existence of challenges that hamper the use of Web 2.0 platforms in the library is presented in the succeeding discussions.

Challenges

A focus group discussion was conducted with 17 academic librarians as participants to identify and explicate the challenges encountered by the libraries. Opportunities in the integration of Web 2.0 in library services were also discussed.

Lack of Staff.

There is no dedicated IT personnel to trouble shoot IT-related problems in the library. Lack of licensed library personnel was also underscored as a perennial problem. In fact, this reflects the over-all shortage of librarians in the Philippines (National Library of the Philippines, 2018) and the challenge faced by academic libraries to comply to the minimum standards set by the Commission on Higher Education, which is 1 fulltime librarian for every 500 students and an additional 1 librarian for succeeding 1,000 students with 2 library assistants/staff for every licensed librarian. Thus, participants emphasized that the task of maintaining different social media channels is an add-on to their overloaded schedule and understaffed offices.

Lack of Familiarity on many Web 2.0 tools

There is no doubt that the librarians are familiar of social media (especially Facebook), video streaming tools, like Youtube, and wiki, since on a personal basis they are using it everyday. However, they have little to no inkling about what the likes of rss, photo sharing and podcasts are about, explaining that they have never used these tools before.

Lack of Training

Librarians are only familiar with one or two Web 2.0 tool and Web 2.0 tool training seldom come by. In fact, seminars and workshop do not provide a comprehensive hands-on experience.

Poor Internet

The respondents discussed that their respective libraries have adequate computers and internet connections to cater to their students' needs, although intermittent internet connection is a problem, a perennial struggle, particularly for librarians in rural and coastal areas (Labucay, 2014).

Planning

Web 2.0 integration is not on the library's five-year development plan, although the participants agreed on the need to include provisions for ICT development as soon as their revision is underway.

Limited use of other Web 2.0 tools

All the respondents revealed that their libraries do not use RSS, podcast and presentation sharing tools. They also have very limited skills in using these tools. They also fail to regularly update these accounts due to the lack of personnel and multitasking. Likewise, personal use of Web 2.0 tools by the librarians did not translate to their use of it in the library.

Limited Web 2.0 Skills

There are certain Web 2.0 related tasks that the librarians find challenging, like setting up blogs and writing and posting contents, since they admit that they have limited technical skills and writing abilities required to set up and keep blogs updated and relevant. These skills, however, are crucial to create, contribute, and revise online content (Alexander, 2006; Yap, 2012).

Opportunities

Interest to use other Web 2.0 tools

The librarians were found to be interested of utilizing Web 2.0 since they consider it helpful in connecting with each other, particularly in link building and online resource sharing. Majority also has strong interest to learn Web 2.0. Their supportive administration, familiarity in using the computer and Internet, strong internet connection and the free access to Web 2.0 tools were also mentioned as opportunities for Web 2.0 integration.

Available IT Infrastructure

Aside from skills and knowledgeable personnel, having IT facilities is crucial to ensure the success of Web 2.0 integration. The participants confirmed that their respective libraries have the basic facilities needed to jumpstart Web 2.0 integration: space for internet stations, personal computers, and internet connections, making Web 2.0 integration possible. With slow internet connection, it is possible to get an upgrade with the internet provider after consultation with the school's IT team.

Perceived Usefulness

FGD participants believed that when Web 2.0 becomes fully in place, it would improve their performance in their job and even enhance their effectiveness at work. Thus, eagerness to use Web 2.0 is driven by its usefulness and in making librarians more productive and efficient at work. It should also effectively increase job satisfaction and enhance their learning and skills. As Yuen, et al. (2011), and Singh and Gill (2012) discussed, Web 2.0 tools should help increase academic efficiency and facilitate communication and knowledge acquisition. Thus, the use of a technology, like Web 2.0, should be free from effort for optimum impact on the intention to use (Davis, 1989).

Support from administration

Since the participants believed that the library is crucial for the success of an academic institution, they agreed that it is possible to get the school administration's support in implementing Web 2.0. In context, support translates to financial provisions and the school management's involvement in planning for Web 2.0 inclusion in library development plans.

Willingness to be trained

There is the interest to learn Web 2.0, especially if the right training come along. However, one librarian pointed out that they could actually start on their own, if they are interested. Free, self-paced online trainings and tutorials are available online.

Basic ICT skills

Librarians could at least deliver the common ICT tasks necessary for their work, like answering emails, posting on Facebook, replying on comments, and using the internet to research.

CONCLUSION

As a platform for collaboration, Web 2.0 emphasizes the librarian's role as guide to information rather than the traditional role of information keepers, placing librarians in the forefront in advocating technology adoption and integration. For the case here in Panay Island, there is still a long way to go before academic librarians totally embrace Web 2.0 as tools to ease the delivery of services, facilitate information exchange, and promote collaborations. While long the road may take, knowing where the library is at the moment and to which it should go makes it easier for the librarians to understand what should be done. Developing a Web 2.0 strategy to promote this aspect of their services and devise solutions to specific problems as part of their strategy is necessary. There is a need for academic libraries to embrace change, which is quite difficult for large institutions to do. With the Web 2.0 technologies, academic libraries can make change a very easy and consistent activity. Thus, evaluating and considering challenges and opportunities is a crucial step to come up with feasible and executable programs and policies for successful Web 2.0 integration.

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