

Web 2.0 Use by Librarians in a State in Nigeria

Chinwe V. Anunobi^{1*} Andrew U. Ogbonna²

1. Digital Library, Festus Aghagbo Nwako Library Nnamdi Azikiwe University Awka Nigeriay
PMB 5025 Awka, Anambra State Nigeria
2. Digital Library, Festus Aghagbo Nwako Library Nnamdi Azikiwe University Awka Nigeria
PMB 5025 Awka, Anambra State Nigeria

* E-mail of the corresponding author: chiinobis@yahoo.com

Abstract

The survey was conducted with the focus to determine the awareness and use of Web 2.0 tools by librarians in Anambra state in Nigeria. Questionnaire was designed and distributed to all professional librarians in the state who are members of the Nigerian Library Association. Result shows a low awareness and use of Web2.0 tools by the librarians. Social networking sites are the mostly used among the various tools. Their use of the tools is dependent on the librarians' place of work with the academic librarians using the tools more than others from other places of work. Most of the librarians use the tools for communication and profile publicity. Personality characteristics, computer expertise, motivation, lack of facilities and access restriction are among the impediments to the librarians' use of Web 2.0 tools.

Keywords: Nigerian librarian, Web 2.0 use , librarian web 2.0, web2.0 awareness, challenge web 2.0 use , social networking sites librarian use, blogs librarian use

1. Introduction

The role librarians play in the development of citizenry cannot be over emphasized. From the pre-school age through the various stages of education which requires formal and informal knowledge acquisition, there is the need to call or liaise with librarians at one point or the other. By virtue of their training, librarian's presence is felt as information resources are sourced, acquired, processed and made available for use.

Before the turn of the twentieth century, information resources were predominantly in print format and librarians play the central role of sourcing, acquiring, processing and making the resources available for the present and intending users, all in print form. The advent of computer and communication technologies in the twentieth century has continued to vest the same responsibilities on librarians despite the changing packaging and delivery format from print to electronic.

In spite of such development, librarians did not rest on their oars but have continued to enhance their capacity in order to address the required operations and services. New mode of library operations and services are made possible through automation and digital processes. To satisfy the yearning needs of the new set of information users (digital generation) who need information access and use to be interesting, and fun (Minocha, 2009), librarians began to transform staff competencies, services and access models (Casey & Savastinuk 2006).

Recognizing the shift of information user's attention to Internet and the Web as elaborated by Haythornthwaite (2005), librarians extended their operations and services to the web. The use of the web by librarians at this point was restricted by limited computer science and technology skills. This is because the website used for operations and services are static, thereby requiring the acquisition of Java and php competencies to use them. Advances in web development further unveiled a move from the static web or Web 1.0 (Barskey (2006), to a platform where users are opportune to interact with the web through the creation, deleting or remixing of content (McManus, 2009). As information providers, librarians were therefore, empowered to jettison the limitations of Web 1.0 to serve library practitioners better with the facilities provided by Web 2.0. The basic step to ensuring that librarians in Nigeria utilize these new innovations in web development is to identify their awareness and use of Web 2.0 or social media.

2. Literature Review

Web 2.0, which was described by Abram (2007) as a better web was a paradigm shift from web 1.0 (static web), e-mail and search engine to other interactive platform. The technology infrastructures of web 2.0 according to him include software, content syndication, messaging protocols, standards-based browsers and various client applications. He further stated that this web platform is about conversation, interpersonal networking, personalization and individualization, open communication and decentralization of authority, freedom to share and re-use. Furthermore, Gabrela (2009) defined web 2.0 as the social use of the web which enables users to collaborate, create content, generate knowledge and share information online. Food and Agriculture Organization (FAO 2009) in their e-learning resource for social media course described web 2.0 as the term people use in referring to “easier to use” web-based tools needed for: content creation/user generated content, connecting with people/social networking, collaborating as well as other people-to-people interaction. Due to the nature of the platform and application, web 2.0 is often referred to as “social media”. The focus of these definitions notwithstanding is to pinpoint the basic characteristics of web 2.0 as presented by Downes (2004), Klempere (2006), and Anderson (2007). These include:

- the user generated content, self/personal publishing and self expression;
- collective intelligence or wisdom of crowds; information sharing;
- network effect or chain effect; openness or working with open standards, using open sources, free data, re-using or remixing of data.

With reference to the use to which web 2.0 tools are put to, FAO (2009) e-learning package grouped them into social network, collaborating and contributing to Internet and aggregating tools. Scottish Library and Information Council and Chartered Institute of Library and Information professionals in Scotland (n.d) listed the tools as social networking, Video and photo sharing, blogging and Micro blogging, social book-marking, wikis and resource organizing tools. By expansion, Abram (2007) included folksonomies and tagging.

The underlying motive of Web 2.0 is generating, packaging and disseminating information on the web in the form that is acceptable to individuals, peers and the global community without web technology competences. Consequently, the librarian whose responsibility is primarily aimed at providing information to the general public can now overcome the limitations of static web and to enjoy the opportunities provided by web 2.0. To achieve that, librarians began to address the ways Web 2.0 could be adopted for effective library services. The result is the evolving term “Library 2.0” as commented by Michael Casey on his Library Crunch Blog. Miller (2005) noted that Library 2.0 is the application of Web 2.0 thinking and techniques to library services and collections. As a new mode of library service, Casey & Savastinuk (2006) considered library 2.0 to be the instrument for the revitalization of the operations of libraries. The reason for this expectation is that Library 2.0 as suggested by Maness (2006) is because, it is user-centered, provides multi-media experience, socially rich and communally innovative. These elements which was derived from the innovative nature of Web 2.0 seems to augur well for the 21st century information users who are more interested in instant, interactive, socially and multi media services. Many reasons and benefits justify the use of web 2.0 by librarians. These include sharing of information through discussion groups, promoting social interaction, book recommendation, and peer classification of resources (folksonomy) for collective intelligence, creation of Internet subject guide, adding and updating content and information literacy. (Barsky & Purdon 2006, Hamptons & Welma 2002, Alexander & Levine 2008, Pacheco, Kunn & Grant n.d, Bussart 2007).

The importance of web 2.0 in education and recreation suggests that librarians whose primary role is to provide information resources in a way acceptable to their community of users should be at the fore front of the use of Web 2.0. Furthermore, librarians play the leading role in newest technologies and often train others on their use through information literacy (Abram 2007).

Nevertheless, studies are replete on the awareness and use of web 2.0 by librarians especially in developing world. The popularity of Web 2.0 use is overwhelming on news media, telephones and Internet such that its awareness is taken for granted. It is therefore not surprising that Sandars and Schroter (n.d) found in their studies that medical librarians are aware of Web 2.0 technology. Awareness however, does not suggest use; hence the medical librarians have low use of Web 2.0. The result was also confirmed by Charninga and Barnett-Elis (2007) in their study on the awareness and use of facebook by librarians and the findings by Pacheco, Kuhn and Grant (n.d) that only a few UK medical school librarians are currently using Web 2.0 though, still at the experimental levels. They use it mostly to push information rather than as a two way communication platform. Olusana (2006) also discovered that its use by Nigerian library professionals is not very popular. In the study on awareness and use of facebook, Pacheco, Kuhn and Grant (n.d) further suggested that low use and acceptability is likely to be found among older generation of academic staff. Atilomau & Onuoha (2011) found that librarians are more aware of facebook than the LinkedIn, microblogging tools, and twitter. Bonanno (2005) found that library and information professionals used wikis and blogs most. In his study Sauers (2006) discovered that librarians enjoy using blogs. A study by Pacheco, Kuhn and Grant (n.d) showed that of the 20 librarians studied only 6 have blog sites which happened to be the most used of

web 2.0 tools for information literacy. Atilomah & Onuoha (2011) found in their study that among facebook, twitter and linkedin, facebook is most used and twitter is the least used.

Librarians put web 2.0 tools to various uses. Blogs,image/video sharing tools and wikis are used to post resources, reviews and information on new books and programs of interest by librarians; embed services, establish web presence, collective intelligence and to teach information literacy (Scottish Library & Information Council & Chartered Institute of Library & Information Professionals in Scotland (n.d), Bonano & McManus (2009), Barsky & Purdon (2006) & Maness (2006). Pachecho, Kuhn & Grant (n.d) further suggested that the low use and Twitter and social networking sites are used to announce information to users, recycle content, communicate with experts and colleagues, market services, create discussion groups, and find solution to work problems (Cook & wiebrands, 2010, Hendrix et al 2009, Atilomah & Onuoha 2011, Bonanno, MacManus 2009.). Really simple Syndicate (RSS) feeds and social book-marking tools are used to aggregate, reuse and remix content, create internet subject guide, folksonomies and create updates on news items (Barsky & Purdon 2006, Pachecho, Kuhn & Grant(n,d) Maness 2006, MacManus 2009).

Despite the use of Web 2.0 by librarians, Aharony (2009) discovered in his study of Israeli librarians that four elements influence its use. Librarians may differ in their use of Web 2.0 based on personality characteristics (resistance to change), computer expertise, motivation, importance and capacity towards studying and integrating different applications of Web 2.0. These factors are identified by Gbaje (2007) as lack of facilities in developing countries. Ascroft & Wetts (2005) described it as lack of competencies while Atilomah & Onuoha (2011) presented the factors as Laissez-faire attitude of information professionals and privacy issues. Scottish Library & Information Council & Chartered Institute of Library & Information Professionals in Scotland (n.d) included restricted access issue.

Considering the present and future benefits of Web 2.0 in the area of personal development, operation/services as well as professional capacities enhancement, the impeding factors will not be allowed to undermine its use. Abram (2007) reiterated that among the approaches to overcoming the psychological and environmental influences, is the improvement in the capacity competences, aptitudes and attitude of Librarians. This could be achieved through training on the use of Web 2.0 Sandars & Schrotex (nd). Pollack and Brown (1988) emphasized that librarians should adopt formal and informal learning methods to keep up-to-date with the changing situation.

3. Statement of the Problem

Web 2.0 tools are available on electronic devices as well as the Internet, and are being used by news media for gathering and broadcasting information. No wonder its awareness has no bounds. Librarians, as information professionals and members of the global society are not ignorant of its availability. Studies have been carried out to demonstrate its use by librarians in various spheres of life. Literature has unveiled Web 2.0 benefits to librarians hence, the term Library 2.0. Though studies have shown that effectiveness of librarians' operations and services as well as career development in the 21st century is enhanced by the use of Web 2.0, it is not known the extent of awareness and use of these tools by librarians in developing countries, like Nigeria. This is necessary in order to provide insight into the use of these tools for library services. Hence the research is put in place to ascertain the use of Web 2.0 by librarians in Anambra State, Nigeria.

3.1 Objectives

The study is aimed at determining the Web 2.0 use by Librarians in Anambra State Nigeria. Specifically, it is poised to:

1. Ascertain the librarians' awareness of Web 2.0 tools;
2. Find out the Web 2.0 tools used by librarians;
3. Identify the librarians' purpose of using Web 2.0 tools;
4. Determine the impediments to librarians' use of Web 2.0.

(3)

3.2 Hypothesis

The Social sites used by librarians are independent of the libraries they work.

4. Method

This is a descriptive survey which sought to ascertain the use of Web 2.0 by librarians. All 100 professional members of Nigerian Library Association Anambra State chapter at the time of this study were used for the study. Self

designed questionnaire comprising of bio data section and Web 2.0 awareness and use section was distributed to the librarians, using their contacts. Fifty (50) librarians, representing 50% of the distributed questionnaire returned their questionnaires. The result was collated using tables, and graphs. Inference was drawn from the hypotheses using Chi-square.

5. Result

Collation of result show that 19 (38%) of the respondents are librarians working in academic libraries, 24 (48%) work in public libraries, 4 (8%) in school libraries and 3 (6%) work in special libraries. All Librarians who teach in library schools are grouped as academic librarians.

5.1 Awareness of Web 2.0 Tools

The librarians were required to indicate the Web 2.0 tools they have heard or known about. Some of the tools were indicated and they were given opportunity to indicate some more. Their responses were grouped into Voice over Internet call Protocol tools (voice Internet call), social networking sites, image and video sharing tools, blogs, wikis and Aggregating tools. The result is presented in Figure 1. Figure 1 shows that the librarians are mostly aware of Social networking sites. (37.5%) followed by VOIP or Internet calls/instant messaging tools, then blogging, micro-blogging and wikis (21.6%) and image and video sharing attracted (9.3%). Only 7% of the librarians are aware of aggregating tools. The figure also shows that less than 50% of the librarians are aware of each of the Web 2.0 tools. Therefore it can be said that there is low awareness of Web 2.0 tools.

Table1 shows that for each of the tools, academic librarians are more aware of Web 2.0 than the rest of the librarians working in the public, school and special libraries. However, those of the public library followed the librarians in academic libraries closely. There is little or no awareness by librarians working in the school and special Libraries. The librarians' awareness of the different types of tools which makes the group of Web 2.0 is presented in Figure 2. From the 37.5% of librarians who are aware of social networking sites. 21.5% are very familiar with Facebook, followed by Myspace (7.5%) and then LinkedIn (6.5%). Only 2% have knowledge of orkut. The librarians' response indicated that 12% are aware of Google talk, while 10% are familiar with Skype with reference to internet calls. The result also reveals that of 9.3% librarians who are familiar with image sharing, 5.3% are familiar with Youtube while 2.6% & 1.3% are aware of Flickr and Picasa respectively. The librarians' awareness of different Blogging/micro-blogging and Wikis tools also shows that 9.2% are aware of Blogger, 6% know about Wordpress while Twitter is known by 2.4%. Their response on Wikis indicated that 3.2% are familiar with Wikispace while only 0.8% is aware of Pbworks. The result also revealed that of the 7% of librarians who are aware of aggregating tools. 4.5% know about Google Reader, while 0.5% of them are aware of blog lines and Netvibes respectively. Delicious is a familiar tool to 1.5% of them.

5.2 Use of Web 2.0 Tools

The librarians were required to indicate the Web 2.0 tools they make use of. The result is grouped as Internet call tools, Social networking tools, Image and Video sharing tools, Blogs and Wikis, and aggregating tools. The result as shown in Figure 3 revealed that 24% of the librarians used social networking sites. Facebook is the most used among the sites. There is very low use of blogs and wikis (7%) VOIP tools (6%), Image/Video sharing tools (47%) and aggregating tools (4%). Apart from Youtube (10%) and Blogger (14%), none of the individual web 2.0 tools have up to 10% of librarians using them. In other words, there is low use of the Web 2.0 tools except for Facebook. Furthermore, the relationship between their awareness and use is presented in Figure 4. The figure shows that for each of the group of Web 2.0 tools, the librarians awareness are more than they make use of the tool. Comparison of the use of different types of social networking sites among the librarians was considered. The result is presented in Figure 5. The figure shows that though above 50% of all the librarians use Facebook, only librarians from the academic libraries use Myspace and Orkut. LinkedIn is used by low percentage number of librarians from academic (21%) and special libraries (33.3%). This brought about the overall low use of social networking sites.

5.3 Purpose of Using Web 2.0

Librarians were asked to indicate the use to which Web 2.0 is put to. 66% said that they use it to communicate with friends. This is made up of 42.4% academic, 9.1% school and special, and 39.4% public. 18% use it to connect to their professional colleagues. 50% use it to publicize information on the web. 28% use it to publicize their profile on the web while 50% use it for instant message in voice and word.

5.4 Impediment to the Use of Web 2.0

The seventeen librarians who were not using Web 2.0 were required to indicate the reasons for non-use. The result shows that all the seventeen librarians (100%) indicated that they are not familiar with Web 2.0; 88.2% noted that they do not have the required skills, while 82.4% indicated that there is no opportunity for the use of Web 2.0. The respondents also noted lack of the needed facilities (41.2%), lack of encouragement (41.2%) and lack of interest (35%) as their reasons for not using Web 2.0.

5.5 Test of Hypothesis

The result was first analyzed to determine if the social sites used were independent of the library the respondents work in. The study hypothesis shows that more librarians from school libraries (37.5%) use social networking sites than those in the special libraries (33.3%). Public libraries, (15.6%) and academic libraries, (26.02%). A Chi-Square test was done on the use of web 2.0 to determine the significant level using SPSS version 17. The result showed as presented in Table 3 that a Chi-Square value of 20.429 was obtained with ap. value of 0.05. This is less than Table Chi-Square value of 18.55 at 0.05 significant levels at 12df. Therefore, the null hypothesis that “the social sites visited are independent of the libraries the respondents work” is rejected.

6. Discussion of Findings

The result that the librarians are mostly aware of social networking sites confirms the finding of Atilonan and Onuoha (2011) that librarians in their study are more aware of social networking sites than Web 2.0 tools. However, low awareness of Web 2.0 is counting to what is obtainable in some other countries like the story of medical librarians by Schroter (n.d.). Also, the more awareness of Facebook than other social networking sites including, LinkedIn contains the finding of Atilonan and Onuoha (2011). It could also be as a result of popularity which Facebook enjoys in this part of the world. Greater awareness exhibited by librarians from academic libraries than others from school, public and special libraries could be attributed to exposure and enhanced professional networking abilities of academic librarians. It is surprising that in a country where telephone tariff is very high, librarians are not aware of the opportunity of free calls provided through Googletalk and Skype.

The result showing general low use of Web 2.0 tools follows the findings of Pacheco, Kuhn and Grant (n.d) and Charmingo & Burneu-Ellis (2007). Moreover, only very few UK medical school libraries use Web 2.0. That the librarians use social networking sites more than Blogs and Wikis, image and video sharing tools, instant call tools and aggregating tools contradicts the findings of Bonanno (n.d) that library and information professionals uses Wikis and Blogs most. However, it supports the findings of Atilonan and Onuoha (2011) that librarians used Facebook most among other tools including Twitter and LinkedIn. The general low use of Web 2.0 tools could be attributed to low awareness since one cannot use what he/she is not aware of. Again, it is suggested that the librarians are not offering Library 2.0 services which utilizes Web 2.0 tools as noted by Miller (2005) and by extension limiting themselves from the opportunities Library 2.0 offers as indicated by Barsky & Purdon (2006), Hamptons & Welman (2002) and Alexander & Levine (2008).

However, the result indicating high level of awareness than use suggests that some other factors may have hindered the librarians from using these tools. That, librarians from academic libraries are the only users of Myspace and Orkut (fig 4) still under lines the exposure and networking capabilities of academic librarians which other librarians may not have had. However, inferential analysis using Chi square of social networking sites used by librarians from different types of libraries suggest that the differences in Web 2.0 use among others is a function of the libraries they work.

The use made of Web 2.0 tools follows the finding from studies by Bananno (n.d), Mcmanus (2009), Barsky & Purdon (2006) and Maness (2006) which is to communicate with friends and professional colleagues and to publicize their profiles. The Challenges to the use which include not being familiar with Web 2.0, low skills, restricted opportunity for use, lack of needed facilities and interest confirms the findings of Aharony (2009), who discovered that librarians' use of Web 2.0 is influenced by personality characteristics (interest and familiarity), competence, expertise (skills), motivation (restricted opportunity for use), importance and capacity towards study and the integration of different application of Web 2.0. Lack of needed facilities is confirmed by Gbaje (2007). Other challenges to the use of Web 2.0 are in tandem with the views of Ascroft & Wetts (2005) as lack of competences, Atilonan & Onuoha (2011) as liaises-faire attitude of information professionals.

7. Conclusion

Web 2.0 or the interactive web has brought along with it, a new wave of library and information operations and services which librarians must embrace to remain relevant in the information age. Web 2.0 uses by librarians which serve as a pointer to their immediate and further inactive library operations and services brought the following to the fore: There is low awareness and use of web 2.0 by librarians in Anambra State though; the level of awareness is higher than the level of the use. Moreover, among the Web 2.0 tools, social networking sites are the most used among the Blog and Wikis, internet call tools, video sharing tools and aggregating tools. In effect, though, academic librarians tend to use Web 2.0; their use is dependent on the librarians' place of work, with academic librarians using Web 2.0 more than librarians of other libraries. Nevertheless, librarians use Web 2.0 mainly to communicate with friends and professional colleagues as well as to publicize the profile. The study further concludes that the use of Web 2.0 by librarians is challenged by personality characteristic (interest) computer expertise (skill), motivation, lack of facilities and restricted access which if properly addressed will improve the use of the web 2.0 tools adequately.

8. Recommendation

Based on these findings, the following recommendations are hereby made: Librarians should be encouraged to embrace the use of Web 2.0 tools through capacity building by their employers; the work environment of librarians in public, school and special libraries, including academic libraries should be re-positioned by providing the needed facilities to enhance the use of Web 2.0 tools; library automation and digital access should form the basis of library operations in all types of libraries – academic, public, school and special libraries in order to meet the users' present information need; and in-house trainings, seminars and workshops on the existent and use of web 2.0 tools should be organized from time to time for librarians and library users to help themselves become familiar to the different Web 2.0 tools, their potentials and use approach. This would help to improve their competencies in library service delivery in this new information society.

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| Tools | Total % Awareness | Awareness by Type of Library | | | |
|---------------------------|-------------------|------------------------------|-------------|------------|-------------|
| | | Academic n=19 | Public n=24 | School n=4 | Special n=3 |
| Social Networking Sites | 37.5 | 18 | 3 | 1.4 | 2.5 |
| Internet Calls | 22 | 14 | 8 | 0 | 0 |
| Blogs, Microblogs & Wikis | 21.6 | 13.2 | 5.2 | 0.8 | 2.4 |
| Image & Video Sharing | 9.3 | 4 | 3.3 | 0 | 2 |
| Aggregating Tools | 7 | 5 | 2 | 0 | 0 |

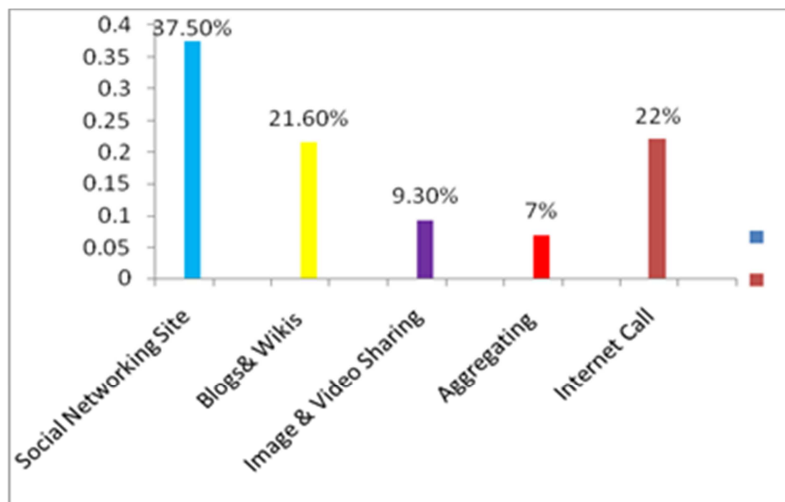


Figure 1: Librarians Awareness of the Various Groups of Web 2.0 Tools

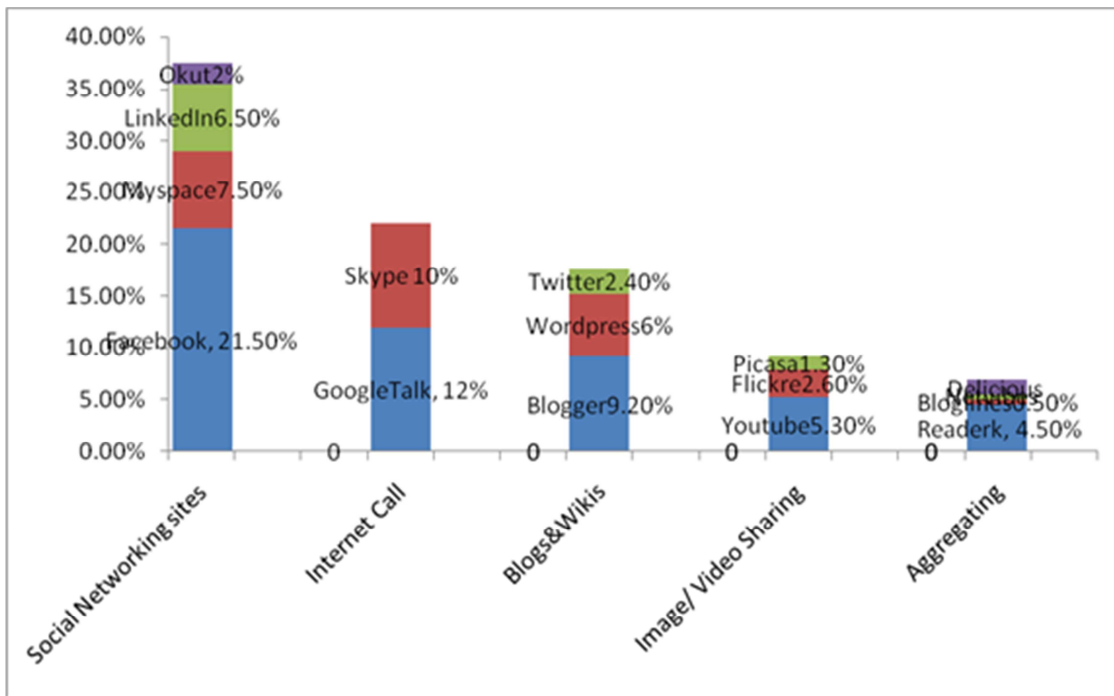


Figure 2: Librarians' Awareness of the Different Web 2.0 Tools

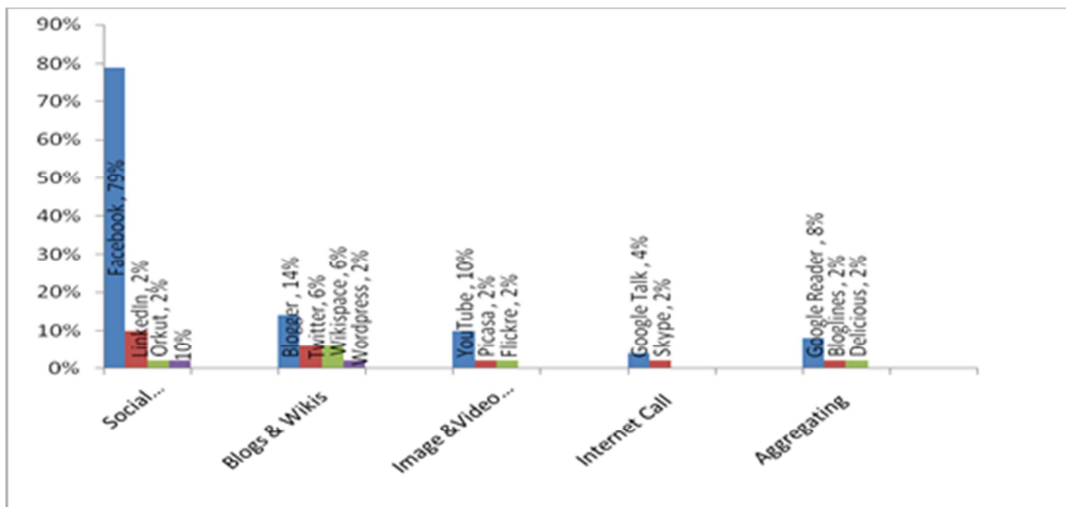


Figure 3: % of Librarians using the various groups of Web 2.0 Tools

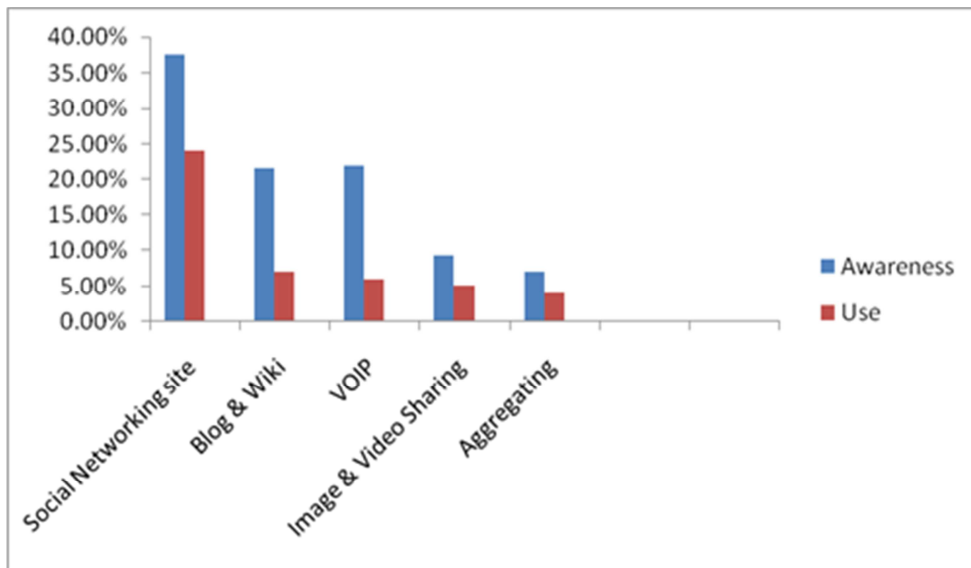


Figure 4: Relationship between Librarians' Awareness and Use of Web 2.0 tools

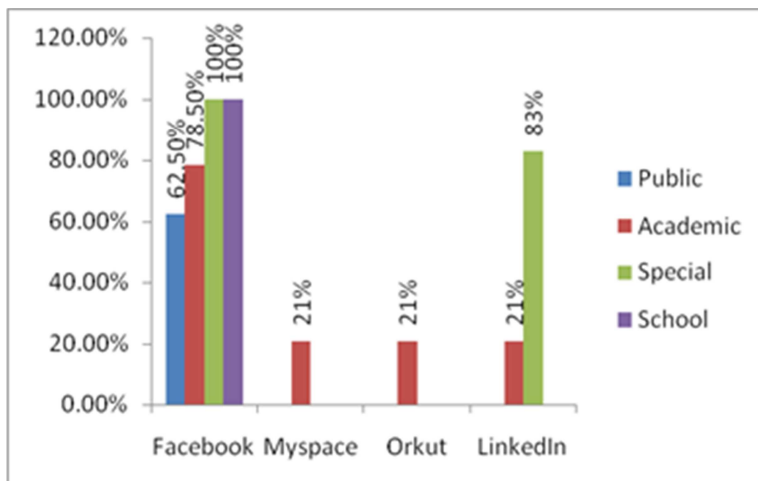


Figure 5: Disposition of Social Networking Sites by Type of Library