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Awareness of Web 2.0 Technology in the Academic Libraries : An Islamabad Perspective

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Abstract

Purpose

The main purpose of this study is to determine the awareness and extent use of Web 2.0 technology in the academic libraries of Islamabad, Pakistan.

Design/methodology/approach

The survey research methods was employed in this exploratory study through google forms on Awareness of Web 2.0 tools, the questionnaire were distributed among 100 library professionals of 43 Public and private sector universities based on Islamabad were selected for this study,72 questionnaires were received, showing a response rate of 72% per cent , the data were scrutinized and tabulated using MS Excel 2010 and SPSS.

Findings –The study imply that the young library professionals are more interested in the activities of web 2. technology. In Web 2.0 applications the social networking sites are more usable for the marketing library services, so these tools can be used in order to provide latest and up-to-date information to the end users. The time consumption and and fear of misusing peroneal information are some major obstacles by using Web 2.0 technologies in the library services.

Research limitations/implications

As this research covering only Islamabad region of Pakistan, so, the research in future may be conducted in order to know more about these kind of applications in future in library services of Pakistan.

Practical implications

As this paper has justified the web 2.0 technologies in academic libraries of Islamabad , so, in future it may be considered as a guidance tools for the researchers in Pakistan and may be demonstrated while conducting research on Web 2.0 in its proper perspective.

Originality/value

This paper provides factual and reliable data on the same topic which will be valuable as justifiable by highlighting the same issue in future.

Keywords: Library 2.0 Web 2.0, University Libraries- Islamabad, World Wide Web, academic libraries

Paper type: Research paper

1.Introduction

Before taking initiative on this paper, first of all we will introduce Pakistan, where it is situated and what is the geographical location of this country in the world map. The great significance and its location in the world map, a land with an area of 770,875 square kilometres and water area of 25,220 square kilometres beautify this country as one of the most charming geographic zone in the world. Plateaus, Hills, forests, deserts and profound blend of landscapes from the coastal areas of the Arabian sea in the south to mountains of the Karakoram range in the north is the most beautiful geography of this country.   As the target population of this paper is the university libraries of Islamabad. Islamabad is the capital of Pakistan and the second most beautiful capital of the world after London, it is located in the foot hills of the Margalla, a well -planned and modern city with God gifted natural scenery, the greenery is the biggest attraction for tourists visiting the city. The total area of Islamabad is 906 Sq. KM, which includes Urban and rural areas. The current Literacy rate of Islamabad is 88%.

ARPANET (Advanced Research Projects Agency NETwork), is the pioneering authority of internet which can be traced back by the experience of Defense Advanced Research Projects Agency (DARPANET). The internet was available at governmental and educational institutions until 1992. In the History of networks and networking communication, the internet was considered as paradigm shift (Ata-ur-Rehman 2011). In the beginning, there was web 1.0 application being used in various institutions. In the past. the usage of web 1.0 was a one-way communication and HTML was used to provide the read only information to the visitors through connecting networks. But, later on the advent of Web 2.0technology   were introduced as a two-way communication to connect the peoples and facilitate them the right information (Nicholas Joint 2009)

The DiNucci in her article "Fragmented future" highlighted that the web 2.0 was used for the first time in 1999, but in current use the term which she used does not related directly (Kebede H. Wordofa, 2012). In brain storming session of a conference which was held in 2004, O'Reilly the founder of O' Reilly media highlighted this term. But in 2005, the term was re-introduced by O'Reilly in its current use. According to him, there are seven underlying principles of Web 2.0 as cited in in his article What is Web 2.0 (Kebede H. Wordofa 2012). The central idea of web was presented by O'Reilly[i], he described that through web the contents could be shared and produced for consumers to use it, further he elaborated that social bookmarker, RSS Feeds, social networking and many other tools have been created for information sharing and communication on the basis of interoperability, Michael Casey who used the concept of library 2.0 in autumn 2005.

2. Problem Statement and Purpose of the Study

In the exploration and usage of these kind of technologies in the library setup of Pakistan, there is wide gap in the literature. The emerging use of Web 2.0 application in the whole world brought revolutions in every field, services in academic libraries have also been influenced by this these technologies. The Information professionals in Pakistan, use these kind of technologies partially or as a whole, keeping in mind the usage and applications of web 2.0 technology in the academic

libraries at university level in Islamabad, this paper will be first in nature, which will provide basic information on Web 2.0 applications and similar technologies being implemented in the library services at university level.

Research Questions

The following Questions were asked while conducting this study:

- What type of Web 2.0 technology do you use in your academic library?
- What are the uses of Web 2.0 Technology in the academic libraries of Pakistan?

3. Research Methodology

The study is based on survey. Top five subject experts were consulted on this issue. Topic, objectives and questionnaire were sent to these experts for their adept inputs. The changes suggested were incorporated accordingly before sending it to the participants. The google forms were used as a tool for data collection and the link of the forms were sent to the 100 participants (Library Professionals) of 43 public and private sector universities of Islamabad. The email addresses were taken from HEC Digital library pages, websites and Library pages of different universities. A Staff directory on each library page with staff email made this research more easy to contacting them directly. In response of 100 Questionnaires, only 72 had filled the questionnaire successfully and were sent back via emails. the data were scrutinized and tabulated using MS Excel 2010 and SPSS. .

4. Literature Review

Numerous studies on the utilization of web 2.0 technology have been conducted by different professional institutions, organizations and individual researchers for example Berners-Lee, T. et al, (1999) in his article mentioned that the WWW was used as a tool for gathering knowledge of human through interaction and collaboration. The Library Marketing Toolkit written by Ned Potter, has explained in this book that there are only really a handful of libraries you can point to and say 'yes, their marketing is good enough" (E. Massis, 2014). Darcy DiNucci used the term web 2.0 first time in her article in 1999. Its rise and popularity began in 2004, when O'Reilly Media and Media Live organized the first Web 2.0 conference. (Md. Milan Khan, 2014) The concept of Web 2.0 was crystallized from the process of measuring the reasons for success of some Internet companies in comparison with their competitors (O'Reilly, 2005). Technological advancement has introduced extraordinary changes in every occupation as well as librarianship. A library must create new thoughts and should react to development within community in order to feed academic development. (Haroon Idrees, 2016). There are lots of library and information resources and products that can be marketed to library's clients. Adewale, Omolola, & Ladipo Sunday, (2012) dilated upon that libraries must market their services like SDI, CAS, document delivery services, abstracting and indexing services, photocopying, services, record management and rental services. Web is making progress in the library services , in which the web 2.0 will achieve this goal in short span of time. Md. Milan Khan, (2014) defined in his article that most of the analyst in library field considering web 2.0 as a tool for social interaction and content

creation. Web 2.0 tools facilitate sharing, networking and disseminating information among users and other professional groups. Library websites of universities are virtual presentation of the university libraries to the world are increasing to with the passage of time to provide services to the end users via electronic tools out side the library. (Pathak, Pal and Rai, 2008). As the library services are reshaping from time to time and users to users (U2U) round the clock , the changing nature of services, information, ideas views and comments are also changing in the current scenario, the paradigm shifting from manual setup to virtual space which is a big challenge for the library professionals. The multiple number of channels are increasing through web 2.0 technologies which create an unlimited responsibility to information services providers and facilitators in this new technology. (Muhammad Yousuf Ali, 2014). In short we may say that the services being provided via Web 2.0 are more creative , based on the community needs there are few libraries which are using some form of Web 2.0 Technology , the use of this technology will increase by large number of participation of the student for the utilization of library services such as cataloguing , classification, reference services , collection development process , information delivery and current awareness services. This technology will also help in many other services of the library, such as user orientation programme, news and library events, information retrieval, etc. Participation in various function and services of the library , the authority will extend its services to the larger section of the community to avail these services. . In developed countries like America and UK the Web 2.0 tools have already been adopted and implemented but in developing countries like Pakistan such technology are adopted in few universities mostly because of their restricted and tight budget. Many authors have highlighted the problems and hurdles confronted to library professionals in implementation or adoption of web 2.0 tools in developing countries such as lack of knowledge how to use these tools in libraries unavailability of computers, lack of computer and internet facility in libraries of Pakistan lack of awareness of social media use, lack of trained staff, lack of government interest and involvement, copy right issues and bandwidth problems in Nigerian libraries lack of motivation, computer expertise, facilities and personality characteristics were found in the librarians regarding the use of web 2.0 tools. (Arif & Mahmood, 2012; Ezeani & Igwesi, 2012; Abidin, Kiran, & Abrizah, 2013).

5. Study Objectives

This study was conducted keeping in mind the following major objectives:

1. To know the extent of the librarian's familiarity with web 2.0 technologies.
2. To discover the proficiency of Web 2.0 in academic learning.
3. To know the purpose of using web 2.0 technologies.
4. To find out the possible factors which can influence the implementation of Web 2.0 technology .
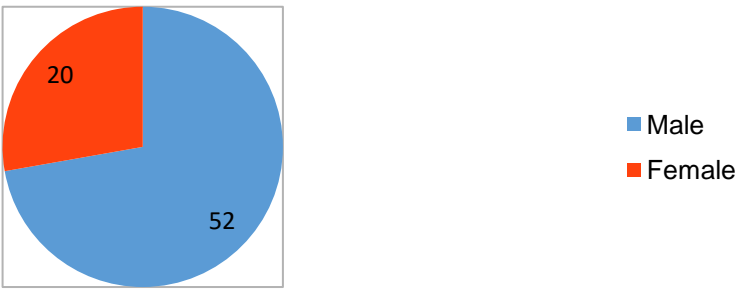
6. Results and discussion

The data analysis of 43 libraries reveals that each academic library in Islamabad is using some form of Web 2.0 Technology, but the most adopted technology was Social Networking sites, like Facebook, LinkedIn, RSS, Wikis, Twitter, Blogs and Instant Messaging (IM). As these kind of

technologies are using by many academic libraries but still there is need of awareness regarding other technologies being hugged by the libraries in developed countries.

Table 1 Gender-wise distribution of the participants

Table 1 shows that the out of 72 respondents, the ratio of male is 52 (72.2%) Whereas the ratio of Female is 20 (27.8%).
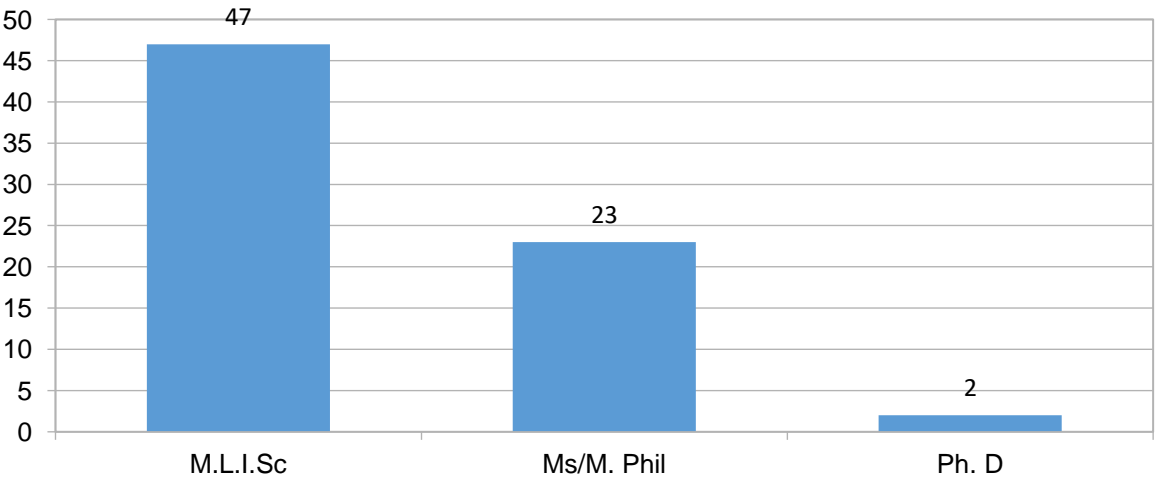
Gender-wise distribution of the participants

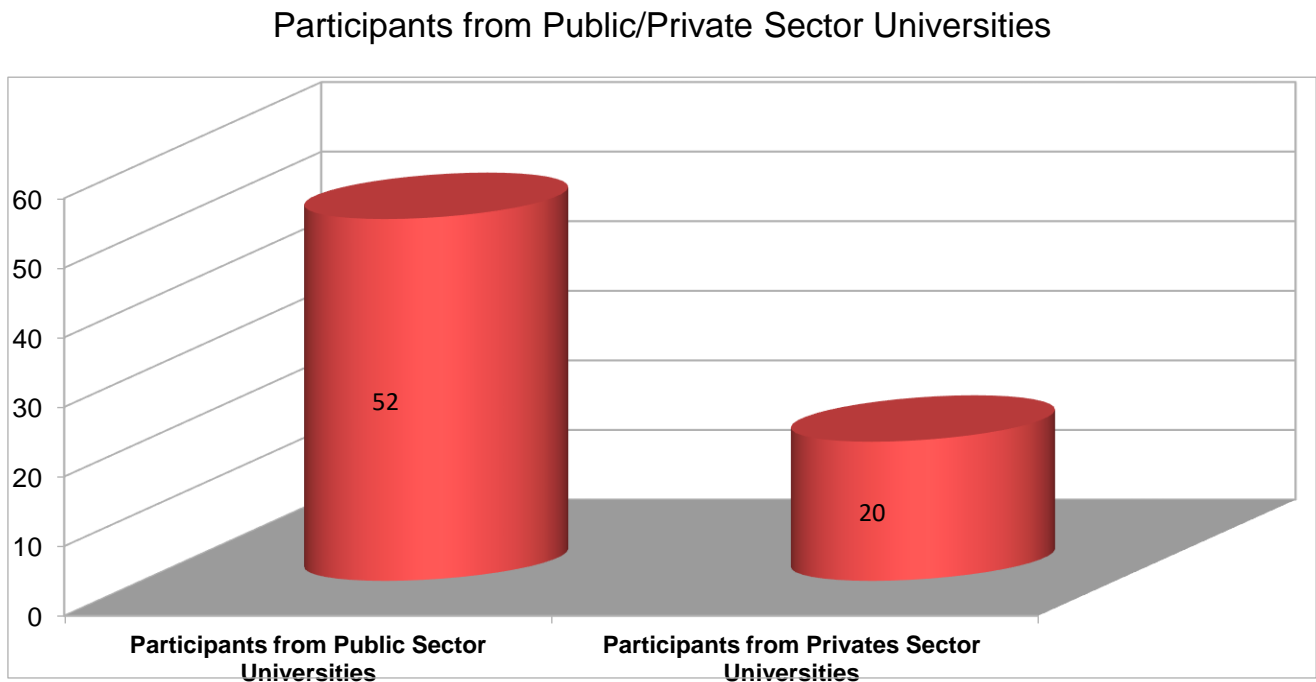**Table 2: Frequency of Qualifications of Respondents**

Table 2 represents the level of education of the participants. About 47(65.77%) is holding master degree 32(32.4%) holding MS/M.Phil. Degree however only 2(2.8%) holding Ph.D Degree in Library and Information Sciences.
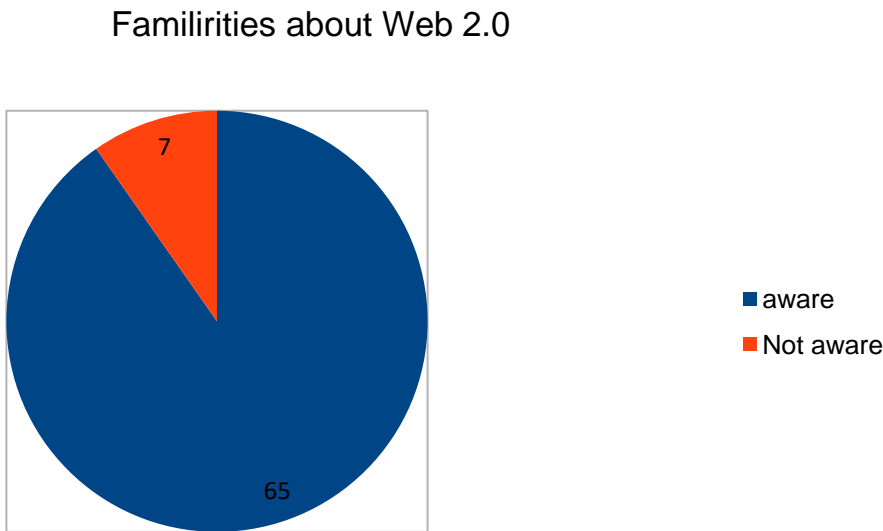
Respondent's Qualification

Table 3 Frequency of Participants from Public/Private Sector Universities

Table 3 shows that participants from public sector universities were 52 (72.22%) whereas the number of private sector universities were 20(27.77%).

Participants from Public/Private Sector Universities

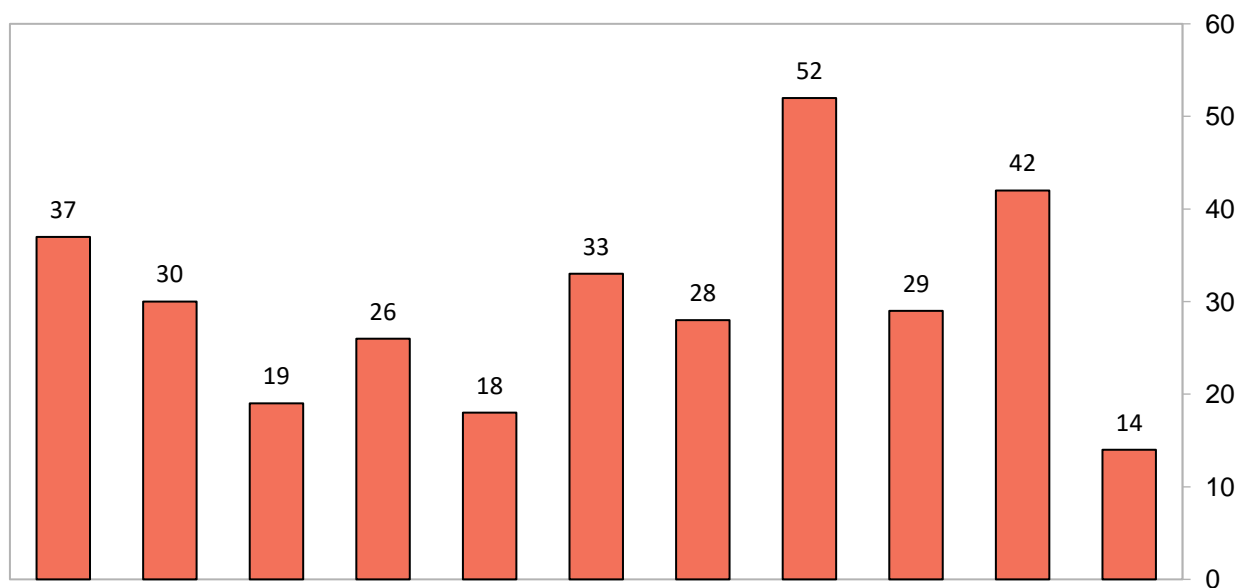**Table 4 Frequency of Familiarity with Web 2.0 Technologies**

Table 4 represents the awareness about web 2.0 technologies in the libraries of the capital. About 65 (90.27%) are aware about this technology whereas 7(9.72%) are not well aware about Web 2.0 technology in their academic libraries.

Familirities about Web 2.0

Table 5 Frequency of Web 2.0 Technologies Implemented in Various Libraries

Table 5 represents the various technologies adopted by the librarians in their university libraries. The highest usage in the academic libraries are Social Networking which are (Facebook, LinkedIn etc., 52(72.22% using these technologies, whereas, the lowest usable technology is virtual environment which is used by only 14(19.44%) in their libraries.
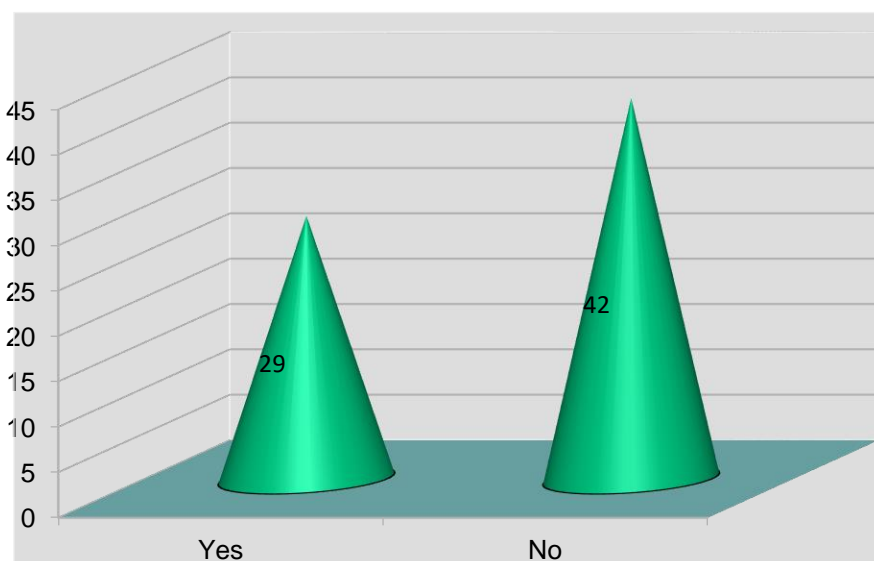
Web 2.0 technologies implemented in Academic Libraries

Table 6 : Frequency about Training on Web 2.0 Technology

Table 6 shows the frequency about training regarding web 2.0 Technology. Only 29(40.27%) agreed that training has been provided by our universities whereas 42(58.33%) respondents had their views that there is no training opportunities in our universities on web 2.0 Technology.
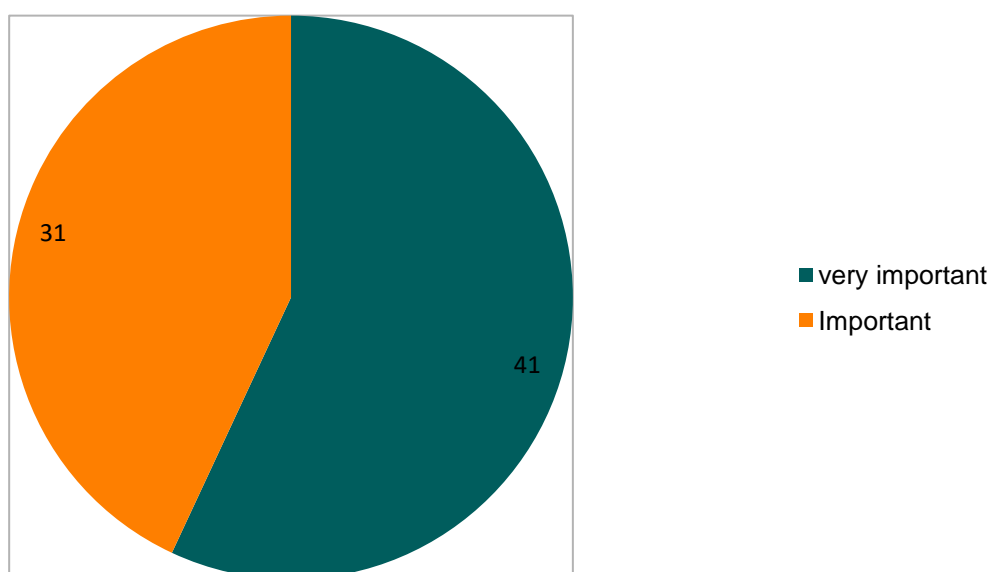
Training on Web 2.0 Technologies

Table 7 : Frequency about Importance of Web 2.0 Technology

Table 7 shows the importance of web 2.0 in university libraries. 41(56.94%) said that the web 2.0 technology is very important whereas 31 (43.05%) said that it is important. There were no answer regarding not important, the result shows that many librarians are interested to adopt this technology however, very few are of them are showing less interest to hug this technology in their libraries.

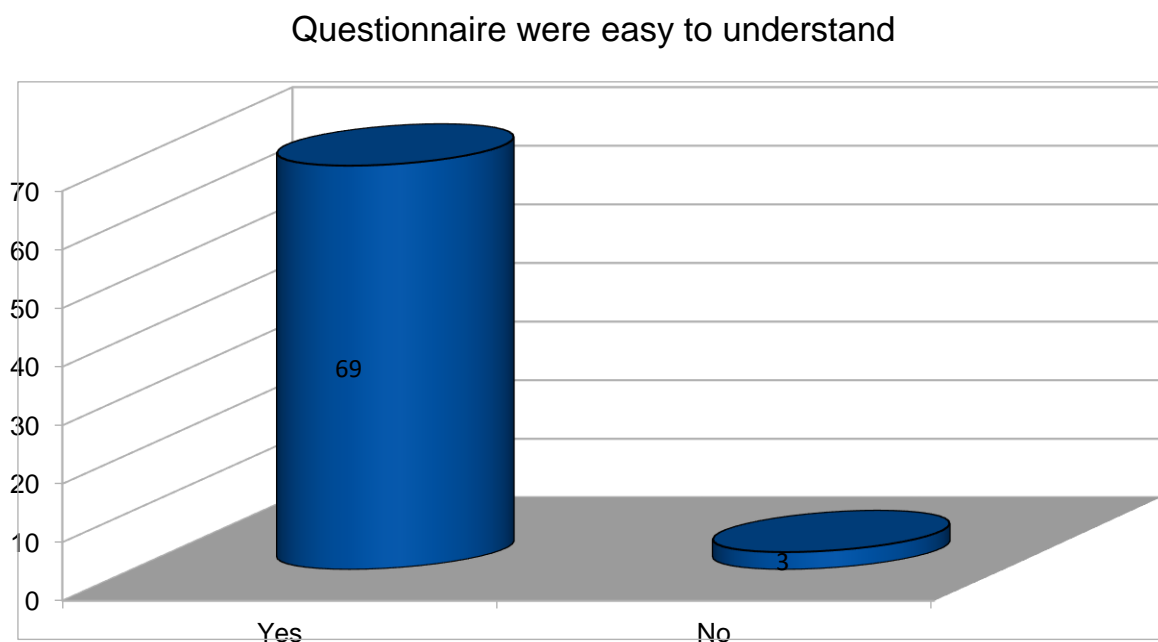## Importance of Web 2.0 Technology

Table 8 : Frequency about Advantages /Disadvantages of Web 2.0

Table 8 shows the perceptions of librarians about web 2.0 technology. About effective market ing services regarding libraries 62(86.11%) were agree while 10(13.88%) shows disagreement. Regarding interaction between staff and users 66(91.66%) were agree whereas, only 6(8.33%) were not agree with this statement. Enhancing library image among users 66(91.66%) were of the opinions that it is a tool of image building only 6(8.33%) were disagree about this statement. For sharing and announcement of library news 63(87.5%) show agreement while 9(12.5%) shows disagreement. Coming to exchanging of opinion 68(94.44%) were agree while 4(5.55%) were disagree to this statement. For keeping yourself up-to-date 70(97.22%) were of view that its up-to-date the users while 2(2.77%) were not agree with this statement. It is a source of Current Awareness Services *SDI 68(94.44%) were agree to this statements while 3(4.16%) were not agree about this view. Regarding high class* hardware/software 64(88.88%) said yes we are agree but, 18(25%) were disagree with this statement. (Mahmood & Richardson, 2013)

S.No	Statements	Strongly Agree	Agree	Agree to some Extent	Disagree	Strongly Disagree
1.	Effectively market library services/resources	23	32	7	3	7
2.	Increase interaction between staff and users	22	30	14	3	3
3.	Enhance library image among users	15	40	11	4	2
4.	Effectively shares library news/Events/Announcements	24	28	11	3	6
5.	Exchanging of opinion	17	34	17	2	2
6.	Keeping yourself up-to-date	19	35	16	1	1
7.	Current Awareness Services/SDI	17	39	12	-	3
8.	Required high class hardware/software	13	27	14	13	5

Table 9: Frequency about the language of Questionnaire

Table 9 shows the overall language of this questionnaire. 69 (95.83%) said that Questionnaire was easy to understand while *3(4.16%) said that questionnaire was confusing, so it shows that large number of population involved in this research were understanding the language of this questionnaire only few were not convinced by the language being used in this questionnaire.*

Questionnaire were easy to understand

7. Major Findings

The study has the following major findings:

1. The librarians at university level has a high familiarity with main web 2.0 tools such as You tube, Facebook, blogs, Twitter, LinkedIn and Wikis.

2. Facebook was used most followed by Wikis, Twitter, LinkedIn and Blogger.

3. Library Thing, RSS, My Space, and Delicious were the least used tools. Their least

usage by librarians is due to the fact that they are not much aware about them.

4. Library professionals utilized Web 2.0 Technologies mainly for communication, teaching, entertainment and Research.

Though the study has some limitations as convenience sampling technique was used and

that the study was limited to the universities at Islamabad, but even then the data collected gave some valuable insight into the familiarity of faculty with web 2.0 technologies. The general opinion expressed by the respondents towards using web 2.0 technologies was positive.The data reveals that the library professional have high awareness and interest in a range of Social Media /Web 2.0 tools. Further research is required to know the current use of web 2.0 tools as well as the barriers to its implementation by librarians to provide data related to accelerating the

application and reducing the barriers in the academic use of web 2.0 tools. To sum up, the conclusions of the study it can be said that the use of this new technology among librarians are encouraging and reflect high level of acceptability and recognition. Keeping in view the conclusions of the study, the following is recommended:

- The Librarians at university level much take interest in order to facilitate members by using such technologies.

- The library associations should have organized training session for the librarians working in various universities in order to implement web 2.0 technologies in their libraries.

- The higher authority should encourage the library professionals to implement these technologies in their libraries.

- The IT Center at university level can also play its role by facilitating the library staff to use these technologies in their Libraries. In addition, the IT Center can also arrange such type of classes/program to create awareness and develop skills among the professionals about the usefulness and effective use of Web 2.0 in academic activities.

- Youtube, Google, and similar technology's tutorial may be used for learning in order to implement such technologies in their university libraries.

- The problems being faced by library professionals while using web 2.0 technology, those were lack of professional skills, Internet speed and Contents for the users.

8. Conclusion

In traditional libraries, peoples often used to visit the library to collect information relevant to their fields but, after the implementation of web 2.0 technology in the academic libraries, the services have been transformed into places which can be accessed from the remote area. This amazing technology has reduced the barriers of space and time. Connecting the common individuals as consumers to the library services, Web 2.0 play a commendable role to connect them and aware them, that what the library has to offer. Web 2.0 is a bridge between the library and consumers which can bring more changes in the relationship between users and libraries by involving them both in library activities .The study reveals that the participants of all academic libraries in Islamabad are using some parts of the web 2.0 technology, but, there was difference in their adoption. Some popular tools of Web 2.0 like Facebook, Twitter, LinkedIn, Blogs, RSS and wikis have been adopted by most of the academic libraries. Many Librarians showed more interests and agreement with the positive aspects of this technology.   The transformation of libraries into active knowledge hubs, these tools must be used in the academic libraries because, by adopting this technology, the library professionals may find the techno-savvy users through an innovative manners and one can offer the traditional services through web 2.0 technology, thus, this technology may bring more potentiality in the library services to build a positive image among library users .

References

1. http://insentonews.com/top-10-most-beautiful-capitals-in-the-world-2018/

2. https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html

3. http://www.digitallibrary.edu.pk/public%20uni.html

4. Rehman, Ata ur and Shafique, Farzana. (2011). Use of Web 2.0 and Its Implications for Libraries: Perceptions of Information Professionals in Pakistan" Library Philosophy and Practice (e-journal). 623.

5. Joint, N. (2009). The web 2.0 challenge to libraries. Library Review, 58(3), 167-175.

6. DiNucci, D. (1999). Fragmented future. Print, 53(4), 32-33.

7. Wordofa, K. H. (2014). Adoption of Web 2.0 in academic libraries of top African universities. The Electronic Library, 32(2), 262-277.

8. Michael E. Casey and Laura C. Savastinuk.(2007). Library 2.0: A Guide to Participatory Library Service. Medford, NJ: Information Today, Inc.

9. Berners-Lee, T., Hendler, J., & Lassila, O. (2001). The Semantic Web. Scientific American, 284(5), 34-43.

10. Ned, Potter. (2012). The Library Marketing Toolkit, 218.

11. Massis, B. E. (2014). Library marketing: moving between traditional and digital strategies. New Library World, 115 (7/8), 405–408.

12. Khan, M., & Sarkhel, J. K. (2015). Web 2.0 Technologies: Building the New Web-Based Libraries.

13. O'reilly, T. (2005). What is web 2.0.

14. Ur Rahman, A., Idrees, H., & khan, A. (2016). Prerequisite and awareness status of Web 2.0 applications in University Libraries of Khyber Pakhtunkhwa. Library Hi Tech News, 33(8), 5-7.

15. Adewale, O. A., & Omolola, I. A. (2012). Utilization of library and information and communication technology tools in medical research. International Journal of Science and Technology Education Research, 3(1), 1-6.

16. Pathak, S. K., & Pal, M. (2008). Proper Content Management to the Library Web Site: Evaluation of all IIT's Library Websites.

17. Ali, M. Y. (2014). Web 2.0 usage in university libraries in Karachi. Academic Research International, 5(5), 197.

18. *Arif, M., & Mahmood, K. (2012). The changing role of librarians in the digital world: adoption of Web 2.0 technologies by Pakistani librarians. The Electronic Library, 30(4), 469-479.*

19. *Ezeani, C. N., & Igwesi, U. (2012). Using social media for dynamic library service delivery: The Nigeria experience.*

20. *Abidin, M. I., Kiran, K., & Abrizah, A. (2013). Adoption of Public Library 2.0: Librarians' and teens' perspective. Malaysian Journal of Library & Information Science, 18(3), 75-90.*

21. *Mahmood, K., & Richardson, J. V. (2013). Impact of Web 2.0 technologies on academic libraries: A survey of ARL libraries. The Electronic Library, 31(4), 508-520*

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