Undergraduate Students'Awareness, Usage and Attitude towards Digital Library in Kathmandu

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Abstract

The study aimsat assessing the perception of undergraduate students towards awareness, usage and attitude to digital library in Kathmandu. The study employed a cross-sectional descriptive research design for the primary data collected through structured questionnaire from the sample of respondents with 218 useable responses, 39 percent response rate,from the pool of students of special programs of management faculty of Tribhuvan University, BBA and BBM. The findings of the survey depicted that students were aware of the digital library, found the search function to be useful, and were pleased display output. Students were interested in learning on new advancement, found speedy download, accessible, improved research skills, high-quality research and prompt information in digital library. However, fewer respondents used the 20 mentioned digital library portals than expected and found difficulty due to limited access of digital library that impacted on material collection, compelled to visit other libraries physically, enhanced fear of finishing work and affected research work.

Keywords: awareness, digital library, limited access, satisfaction, usage

Introduction

The use of digital libraries in the present day is enormous, and it has simplified all academic tasks and enhanced accessibility, connectivity and digital services to its users globally. People have grown more attached to digital libraries, especially those who are engaged in research(Dn et al., 2005). Further, in order to generate, contribute, and publish scholarly research information for open access, accessible to everyone with internet connectivity, libraries have built infrastructures, staffing, and funding models. Libraries have been key collaborators in the open access movement. In this light, the process of creating and disseminating digital knowledge termed as digital publishing is vital in the digital institutional repositories in many libraries (Bailey, 2017). Thus, the key advantages of digital libraries include the ability to store resources in a digital format that is simple for online users to access at any time from many locations across the world. Additionally, digital libraries offer a variety of search options to access the digitized resources (Wiederhold, 1995). Similarly, Library is found to provide a significant connection to the tradition of academic excellence and can work as inspiration for thought (Freeman's, 2005; Lopatovska & Regalado, 2016).

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Camacho and Spackman (2011) found decrease in use of print collections in business disciplines. People prefer print books but are eager to switch to e-books. Moreover, it is possible to create, search for, and use information utilizing digital libraries, which are a collection of related technical resources. From books to representations of three-dimensional artifacts, digital libraries contain a vast variety of content. Either digital content is created, or many analog sources are digitally transformed, to make the content. In order to convert the wealth of traditional intellectual and cultural materials maintained in libraries, archives, and museums into a digital format, extensive digitization initiatives have been made in tandem with the creation of digital libraries (Xie & Matusiak, 2016).

Further, a digital library system is a software system that is built on an architecture (possibly distributed) that offers every feature needed for a specific digital library. Through the associated digital library system, users can interact with a digital library (Theng et al., 2009). Similarly, a collection of technical tools for creating, searching for, and utilizing information, known as digital libraries are available online. Digital libraries' content consists of data, metadata that describes different features of the data, and metadata that links or otherwise relates to other data or information, whether internal or external to the digital library (Borgman, 1999).

The introduction of foreign digital libraries in Chinese scholarly communication in the middle of the 1990s marked the beginning of the notion of digital libraries in China. The findings of this study also aid in determining the accessibility of digital resources, their level of use, and the reasons for and obstacles to their use (Jabeen et al., 2017). On the other hand, digital libraries do not, however, appear out of thin air. A digital library is created through a number of processes, including electronic listing, creation of an electronic catalogue of all library resources, networking, and provision of web access to this catalogue (Arif & Kanwal, 2009). Moreover, it is revealed that a digital library is a major platform for user communication, e-learning, and e-research, not just a collection of documents in a well-organized electronic format. The quality of user services provided in academic libraries is a critical component influencing the performance of the libraries (Chowdhury, 2002; Jabeen et al., 2017). Abdullah and Gibb (2008) found that fewer students are aware of the availability of e-books from the library and that the majority of them had never used an e-book. They also found that there is a lower degree of e-book usage among students. Even those who don't use or aren't aware of e-books expressed a wish to learn more about them.

Walton (2014) stated that choosing to use an e-book was made easier by doing research, reading for fun, being forced to adapt, and being convenient. A drawback to their decision to utilize an e-book was the lack of in-class reading. Another element that proved to be detrimental to the usage of e-books was their lack of accessibility. Their decision to utilize an e-book has nothing to do with their use of textbooks or reading assignments. When a paper book was available, students opted to utilize it; but, when there was only access to an e-book, they preferred that instead. Appleton (2004) showed that using electronic books as a source of information has been generally positive. Mizrachi (2015) showed that users prefer print over electronic formats for learning, but there are many factors that influence their actual behaviors, including accessibility, cost, complexity, and the significance of the reading to the course, according to research comparing reading comprehension in electronic and print formats. Nowadays, universities are concerned that college students spend too much time for surfing the web and but most of the users are upset by the inability to find what they're looking for when they're looking for it. A digital library, which is

a collection of organized and digitally preserved information, provides us authority that was previously unattainable. A digital library may be accessed from anywhere in the world, searched for any word, and copied accurately. Digital libraries may help libraries save money because they need less space than paper information (Dn et al., 2005).

In the context of Nepal, although digital libraries are becoming more and more effective tools, traditional libraries still exist there as well. Therefore, a policy must be adopted to combine traditional and digital resources in order to better meet consumers' information needs (Gupta, 2012). The majority of libraries in Nepal are hybrid ones that, while essentially traditional, also offer computer-based information and services using online or subscribed databases and digitized materials. On the other hand, for Nepal's first digital library, no precise information is known. The Nepal Academy of Science and Technology (NAST) can be considered Nepal's first application of internet technology. But the private sector, Mercantile Office Systems, deserves credit for introducing internet to Nepalese citizens in June 1994(Hanani, 2018). After the availability of internet, Tribhuvan University Central Library constructed a digital library wall within the building with the assistance of British Council Nepal in February 2020 (Sharma, 2022).

Thus, the main purpose of this study is to assess the awareness, usage and attitude of undergraduate students towards digital library consisting the purposes of using digital library, usefulness of search options, understanding the satisfaction of users with display search output, to identify frequency of use, acceptance of digital library, role of digital library in research work and to study the use of digital library during limited accessibility of internet. The introduction section is followed by the methodology and then, results and discussion is followed by summary and conclusion as the structure of the article.

Methodology

The descriptive research design was used to analyze the characteristics of the sample and the questionnaire was developed consisting of different segments as developed by(Arif & Kanwal, 2009; Sheeja, 2010; Wang & Bai, 2016; Moorthy et al., 2019) to achieve the objective of the study. The universe of the study included the students studying in the constituent and affiliated colleges offering both the special programs viz. Bachelor of Business Administration (BBA) and Bachelor of Business Management (BBM) under faculty of management of Tribhuvan University. A total of 562 structured questionnaires were distributed to the undergraduate students currently pursuing the studies in the stated programs of management stream to measure their perceptions. From the returned questionnaires,218 responses were found usable whereas 49 were not usable. Hence, the overall response rate was 39 percent. The questionnaires were administered through both the online as well as physical mode as per convenience within the period from March to May 2022.

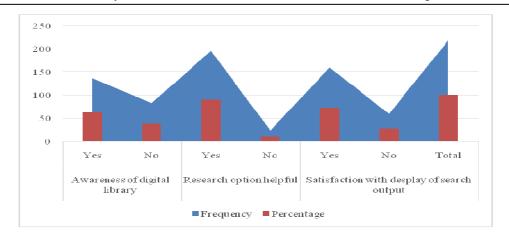
Results and discussion

Table 1

Demographic variables

Variables	Characteristics	Frequency	Percentage
Gender	Male	82	37.6
	Female	136	62.4
Age	19 years old or below	70	32.1
	20-21 years old	107	49.1
	22 years old or above	41	18.8
Name of the course (program):	BBA	137	62.8
	BBM	81	37.2
	Low- middle	62	28.4
Income Level	Middle	146	67.0
	Upper-middle & higher	10	4.6
Purpose of digital library use	Research and Project work	26	11.9
	Study materials	157	72.0
	Other purpose	35	16.1
Frequency of digital library use	Daily	36	16.5
	Weekly	47	21.6
	Fortnightly	14	6.4
	Monthly	22	10.1
	Yearly	94	43.1
	Never Used	5	2.3
	Total	218	100.0

Table 1 depicted that 82 (37.60%) male and 136 (62.4%) female respondents participated in the survey. Responders 107 (49.1%) had an average age between 20 and 21 years, while at least 41 (18.8%) were over 22 years. The participants students from BBA program had 137 (62.8%) as majority and other from BBM program. The purpose of using digital library for the collection and use as study materials remained major intension of respondents 157 (72.0%) which is similar to Walton (2014), 36 (16.5%) respondents were found to use digital library for other purposes whereas only 26 (11.9%) respondents used digital library for the purpose of research and project work. Further, frequency of digital library use among respondents were only few times throughout the year major participants 94 (43.1%) and never used were 5 (2.3%) in the survey.



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Figure 1. Awareness, search option and satisfaction with display of digital library.

The figure 1 reflected that majority of respondents (62.4%) were aware on digital library and this result is consistent with (Wang & Bai, 2016). Similarly, views of respondents on search option shows that 195 (89.4%) respondents expressed search option in digital library were helpful and 23 (10.6%) stated that search option in using digital library were not helpful. Further, Majority of respondents 159 (72.9%) found satisfied with display output in digital library and respondents dissatisfied with display output in digital library were 59 (27.1%) in the survey.

Table 2

Awareness and usage of	Ever Used		Awareness, but non-use		Don't know	
digital library	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
AWON Library	28	12.8	31	14.2	159	72.9
Aminer.org	11	5.0	31	14.2	176	80.7
b-ok.org	22	10.1	27	12.4	169	77.5
British Council's Ditital Library in Nepal	19	8.7	68	31.2	131	60.1
Collection.asdlib.org	8	3.7	32	14.7	178	81.7
Crossref.org	5	2.3	38	17.4	175	80.3
Deepdyve.com	8	3.7	30	13.8	180	82.6
Econbiz.de	12	5.5	28	12.8	178	81.7
E-Pustakalaya – OLE Nepal	22	10.1	70	32.1	126	57.8
Kaiser Library	42	19.3	90	41.3	86	39.4
Kathmandu Valley Public Library	16	7.3	94	43.1	108	49.5
Library Genesis	14	6.4	33	15.1	171	78.4

Awareness and usage of digital library

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library.harvad.edu	7	3.2	43	19.7	168	77.1
Nepal Bharat Library	22	10.1	73	33.5	123	56.4
Nepal National Library	20	9.2	83	38.1	115	52.8
Nepal-Japan Children Library	18	8.3	67	30.7	133	61.0
Oclc.org	10	4.6	25	11.5	183	83.9
Philpapers.org	7	3.2	26	11.9	185	84.9
Scienceopen.com	12	5.5	29	13.3	177	81.2
Tribhuvan University Central Library	19	8.7	81	37.2	118	54.1
Total	218	100.0	218	100.0	218	100.0

Table 2 demonstrated that majority of respondents 159 (72.9%) were not aware about AWON library and minimum 28 (12.8%) were ever used. Similarly, Aminer.org user were 11 (5.0%) and unknown were 176 (80.7%), b-ok.org user 22 (10.1% and unknown 169 (77.5%), British Council's Digital Library user 19 (8.7%) unaware 131 (60.1%), collection.asdlib.org user 8 (3.7%) and unaware 178 (81.7%), crossref.org user 5 (2.3%) and unaware 175 (80.3%), deepdyve.com user 8 (3.7%) and unaware 180 (82.6%), econbiz.de user 12 (5.5%) and unaware 178 (81.7%), E-Pustakalaya user 22 (10.1%) and unaware 126 (57.8%), Kaiser Library user 42 (19.3%) and unaware 86 (39.4%), Kathmandu Valley Public Library user 16 (7.3%) and unaware respondents 108 (49.5%), Library Genesis user 14 (6.4%) and unaware respondents 171 (78.4%), library.harvad.edu user 7 (3.2%) and unaware respondents 168 (77.1%), Nepal Bharat Library user 22 (10.1%) and unaware respondents 123 (56.4%), Nepal National Library user 20 (9.2%) and unknown respondents 115 (52.8%), Nepal-Japan Children Library user 22 (10.1%) and unknown respondents 133 (61.0%), oclc.org user 10 (4.6%) and unknown respondents 183 (83.9%), philpapers.org user 7 (3.2%) and unknown respondents 185 (84.9%), scienceopen.com user 12 (5.5%) and unknown respondents 177 (81.2%) and user of Tribhuvan University Central Library 19 (8.7%) and unknown user 118 (54.1%).

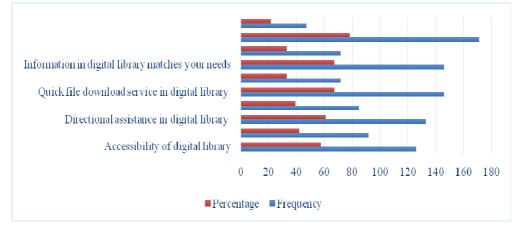


Figure 2. Factors affecting acceptance of digital library.

In the figure 2, curiosity to learn recent development of technology in digital library were 171 (78.4%) and not curious 47 (21.6%). Matching the need user and information in digital library showed positive response of respondents 146 (67.0%) which in line with factors identified by (Walton, 2014) and respondents expressing views with not matching information needs with information in digital library were 72 (33.0%). Similarly, respondents expressing the views on quick file download service in digital library 146 (67%) and views with no 72 (33.0%). Directional assistance availability in digital library respondents in favor of statement yes 133 (61%) and no statement 85 (39%). Finally, respondents in favor of statement 'accessibility of digital library' were 126 (57.8%) and stating no 92 (42.2%).

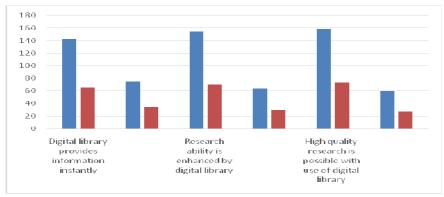


Figure 3. Effects of access to digital library on research work.

Figure 3 depicted that respondents believing in availability of information instantly in digital library 143 (65.6%) and stating not available 75 (34.4%). Respondents stating yes with enhancement in research ability by digital library remained 154 (70.6%) and stating no 64 (29.4%). Further, respondents trusting the use of digital library for high quality research 159 (72.9%) and stating no 59 (27.1%).

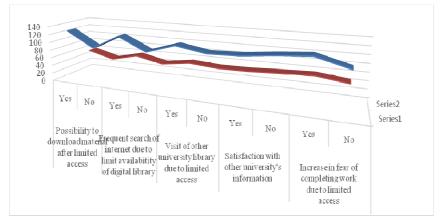


Figure 4. Digital library after limited access.

Figure 4 depicted that the use of digital library after limited access for possibility of download with positive response 128 (58.7%) and no response 90 (41.3%). Respondents searching the internet frequently due to limit availability of digital library were 125 (57.3%) and with response saying no 93 (42.7%). Further, responses on visit of other university library due to limited access with yes responses were 115 (52.8%) and response stated no for the same were 103 (47.2%). Respondents stated yes response 105 (48.2%) in visiting of other university library due to limited access and response stating no for the same were 113 (51.8%). Similarly, increase in fear of completing work due to limited access with yes response were 105 (48.2%) and response with no were 113 (51.8%).

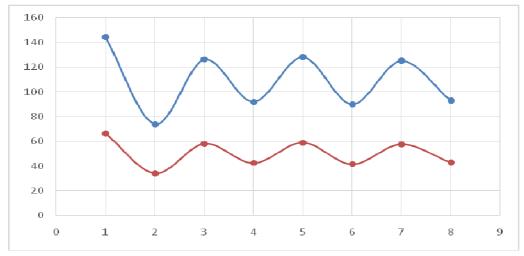


Figure 5. Effects on research work after limited access to digital library.

Figure 5 indicated that quality of search of internet is impacted by limited access in which respondents 144 (66.1%) supported with yes response and 99 (45.4%) stated no for the same. Views of respondents 126 (5728%) expressed views supporting that limited access impact on volume of study and 92 (42.2%) respondents stated no for the same statement. Similarly, supporting views on understanding of research work is impacted by digital library's restricted access with yes statement were 128 (58.7%) and stating no responses were 90 (41.3%). Further, respondents extending supporting views on limited access prevents from learning about current advancements with yes responses were 125 (57.3%) and responses with no statements were 93 (42.7%).

Summary and conclusion

It is inevitable that university students need to use digital library and have access to digital libraries. The majority of the management stream students who participated in the survey were aware of the digital library, found the search function to be useful, and were pleased with the way the results of their searches were presented. Few respondents, nevertheless, had ever used a digital

library; others knew of them but had never used one; and the majority were unaware of the 20 listed portals for digital libraries that were provided. The respondents were also interested in learning about new technological advancements in digital libraries, discovered speedy download services, and were accessible of digital libraries. Similarly, findings discovered that digital libraries improved research skills and encouraged high-quality research while providing information promptly. On the other side, limited access made it difficult to obtain materials from the digital library, forcing users to visit other universities' libraries more frequently and bringing severe fear of finishing work, although the information from other universities met their demands and the restricted use of the digital library affected research work of college students. The study was conducted only within the scope of Kathmandu valley among the students from the colleges offering both BBA and BBM program together in the same premises. Hence, the future research studies could include other variables with large population scope to examine the causal relation using inferential statistical models in Nepal.

References

- Abdullah, N., & Gibb, F. (2008). Students' attitudes towards e-books in a Scottish higher education institute: Part 1. *Library Review*, 57(8), 593–605. https://doi.org/10.1108/00242530810899577
- Appleton, L. (2004). The use of electronic books in midwifery education: the student perspective. *Health Information and Libraries Journal*, 21(4), 245–252. https://doi.org/10.1111/j.1471-1842.2004.00509.x
- Arif, M., & Kanwal, S. (2009). Acceptance of digital library among female students and effects of limited access of digital library on their performance in research work: A case of International Islamic University. *International Information and Library Review*, 41(3), 122–128. https://doi.org/10.1080/10572317.2009.10762806
- Bailey, D. R. (2017). Creating digital knowledge: Library as open access digital publisher. *College and Undergraduate Libraries*, 24(2–4), 216–225. https://doi.org/10.1080/10691316.2017.1323695
- Borgman, C. L. (1999). What are digital libraries? Competing visions. *Information Processing* and Management, 35(3), 227–243. https://doi.org/10.1016/S0306-4573(98)00059-4
- Chowdhury, G. G. (2002). Digital libraries and reference services: Present and future. *Journal of Documentation*, 58(3), 258–283. https://doi.org/10.1108/00220410210425809
- Dn, T. Y., Yyepg, T., Yyepg, T., & Yyepg, T. (2005). TeAM YYePG Understanding Digital Libraries.
- Freeman, G. T., Bennett, S., Demas, S., Frischer, B., Peterson, C. A., & Oliver, K. B. (2005). *Library as Place: Rethinking Roles, Rethinking Space. CLIR Publication No. 129*. Council on Library and Information Resources, 1755 Massachusetts Avenue, NW, Suite 500, Washington, DC 20036. Web site: http://www.clir.org.
- Gupta, J. (2012). *Digital Library Initiatives in India. January*, 80–93. https://doi.org/10.4018/978-1-4666-2500-6.ch008
- Hanani, N. (2018). An Automated Irrigation System Using Arduino Microcontroller, 3(May), 2-6.

- Jabeen, M., Qinjian, Y., Yihan, Z., Jabeen, M., & Imran, M. (2017). Usability study of digital libraries: An analysis of user perception, satisfaction, challenges, and opportunities at university libraries of Nanjing, China. *Library Collections, Acquisition and Technical Services*, 40(1–2), 58–69. https://doi.org/10.1080/14649055.2017.1331654
- Camacho, L., & Spackman, A. (2011). Transitioning to e-books: Usage and attitudes among business faculty. *Journal of Business and Finance Librarianship*, 16(1), 33–45. https://doi.org/10.1080/08963568.2011.530856
- Lopatovska, I., & Regalado, M. (2016). How students use their libraries: A case study of four academic libraries. *College and Undergraduate Libraries*, 23(4), 381–399. https://doi.org/10.1080/10691316.2015.1039742
- Mizrachi, D. (2015). Undergraduates' Academic Reading Format Preferences and Behaviors. *Journal of Academic Librarianship*, 41(3), 301–311. https://doi.org/10.1016/j.acalib.2015.03.009
- Moorthy, K., Chun T'ing, L., Ming, K. S., Ping, C. C., Ping, L. Y., Joe, L. Q., & Jie, W. Y. (2019). Behavioral Intention to Adopt Digital Library by the Undergraduates. *International Information and Library Review*, 51(2), 128–144. https://doi.org/10.1080/10572317.2018.1463049
- Sharma, B. (2022). Remote Access Facilities in Tribhuvan University Central Library of Nepal. *Access: An International Journal of Nepal Library Association*, 1(1), 98–109. https://doi.org/10.3126/access.v1i1.46618
- Sheeja, N. K. (2010). Undergraduate students' perceptions of digital library: A case study. *International Information and Library Review*, 42(3), 149–153. https://doi.org/10.1080/10572317.2010.10762859
- Theng, Y., Foo, S., Goh, D., & Na, J. (n.d.). Handbook of Research on Digital Libraries :
- Walton, E. W. (2014). Why undergraduate students choose to use e-books. Journal of Librarianship and Information Science, 46(4), 263–270. https://doi.org/10.1177/0961000613488124
- Wang, S., & Bai, X. (2016). University Students Awareness, Usage and Attitude Towards Ebooks: Experience from China. *Journal of Academic Librarianship*, 42(3), 247–258. https://doi.org/10.1016/j.acalib.2016.01.001

Wiederhold, G. (1995). Digital Libraries, . 38(4), 85-96.

Xie, I., & Matusiak, K. K. (n.d.). Discover Digital Libraries Theory and Practice.