

Perceptions and Use of the Virtual Library by Undergraduates at the International University of Management, Namibia

Lucy Kiana

University Library,
International University of Management,
Windhoek, Namibia.
I.kiana@ium.edu.na

and

Martin Mabeifam

Department of Information Technology
Faculty of Information and Communication
Technology
International University of Management,
Windhoek, Namibia.
m.ujakpa@ium.edu.na

Abstract

The purpose of this paper is to investigate the perceptions and use of the virtual library by undergraduate students at the International University of Management, Namibia. This study used the quantitative research approach. Two hundred and eighty-six (286) copies of a self-administered questionnaire, comprising closed and open-ended questions were used to collect data from the students. In addition, a semi-structured interview schedule was used to collect data from the Reference Librarian. The findings revealed that most users were aware of the virtual library; however, the level of awareness was relatively higher than the use. Further, the study observed that the pattern of use differed in terms of frequency, preference and location of access. The study also established that most respondents perceived the virtual library as useful and easy to use. Some of the challenges hindering the

effective use of the virtual libraries range from Internet interruption, inadequate computers in the library to lack of skills required for virtual library use, were established.

Keywords: Virtual Library, Virtual Library Services, Academic Library, User Perception, Virtual Library Resources.

Introduction

The role of the library in an academic institution is to be an integral and active part of the educational process in supporting teaching, learning and research by providing timely access to quality, authentic and relevant information resources and services (Uwakwe, Shidi and Abari, 2016). In this era of information, technology has become the means for academic libraries to fulfil their role. No library can claim to fully meet its users' needs if it does not embrace technology. Undeniably, in the quest to meet the ever-evolving information needs and varied topography of the communities they serve, virtual libraries (VL) have found their place as the pillar of efficient and effective service delivery in academic libraries.

A virtual library, as described by Uwakwe, Shidi and Abari (2016), is a library with no physical boundaries. Ape (2011) opines that virtual libraries are internet rooted and information resources, brought to end users through electronic networks. Mudhol and Vasanth (2009) describe it as a collection of resources available on one or more computer systems, where a single interface or entry point to the collections is provided. In essence, VL implies no sense of physical location, whether for the end user or for the source, as the user can access information from anywhere and the information can

be held anywhere (Kaur, 2015; Mudhol and Vasanth, 2009).

The term virtual library has attracted the interest of users because of the increasing medium called the WWW (World Wide Web), making VL the most reachable and important source of information in the world and may replace or complement traditional library. Undoubtedly, technology has become more pervasive and the web has grown into the standard mechanism for delivering library content and service, prompting libraries to develop websites they term virtual libraries, which serve as extensions of their services into the networked environment that deliver similar content and services as their physical counterparts, even though electronically (D'Angelo, 2001; Verma and Verma, 2014).

Virtual libraries have changed the traditional focus of librarians and are indeed 'the new vision of the libraries of the future' (Koganuramath, 2007). To embrace this 'new vision', the International University of Management (IUM) library made great effort to build a virtual library. A variety of information resources and services are made available remotely to the students through the VL for access and use. Like most modern libraries, the IUM library is committed to providing access to online and print resources to support teaching, learning and research. The development of a virtual library at IUM was done with users in mind, to reach a wider clientele, harmonise services and resources across various IUM campus libraries, and provide unlimited access to users without any geographical barrier, among others. However, no study has been carried out since the inception of a virtual library to establish how it is perceived and used by targeted users and whether the users are aware of how their information needs can be met by the virtual library. This study, therefore, aimed to establish how undergraduates at IUM perceive and make use of the virtual library. The specific objectives of this study included establishing awareness of IUM's virtual library among undergraduate students, pattern of use, perception and the challenges faced when accessing and using the virtual library.

Literature review

There is a misconception about the term 'virtual library'; some relate it to World Wide Web, others

term it as a collection of Universal Resource Locator (URL) on a webpage, whereas others term it as a synonym of digital or electronic library. As a result, the terms 'electronic', 'digital' and 'virtual' library have been used synonymously (Gbaje, 2007), despite the fact that their meanings differ. An electronic library consists of electronic materials and services such as e-journals, e-books, video tapes and CD-ROM, accessible by any medium such as a computer; it may be stored in an offline server or online, and it can be accessed remotely via computer network. A digital library, on the other hand, is a collection of digital computing, storage and communication machinery with content and software, delivered digitally over computer networks. Conversely, virtual libraries consists of both digital and electronic libraries existing virtually (Verma and Verma, 2014; Tenant, 1999 as cited in Gbaje, 2007). In simpler terms, digital and electronic libraries can exist without a virtual library, but a virtual library cannot exist without a digital and/or electronic library (Gbaje, 2007).

Gapen (1993) describes a virtual library as "the concept of remote access to the contents and services of libraries and other information resources, combining an on-site collection of current and greatly used materials in print and electronic form, with an electronic network which gives access to, and delivery from, external worldwide library and commercial information and knowledge sources."

Pointing out the benefits of a virtual library, Veeranjaneyulu, Jadhav and Devi (2015); Burke (2009) highlight that VLs eliminate physical boundaries, allow round-the-clock availability, simultaneous access of the same resources, simplify information retrieval as users are able to search terms (words, phrases, titles, names and subjects) in an entire collection, provide user-friendly interfaces, give clickable access to its resources, save space compared to the traditional libraries, and provide user assistance services such as e-reference, interlibrary loan, technical assistance, etc. Kaur (2015) agrees with Veeranjaneyulu, Jadhav and Devi (2015), as his study found that VLs promote the use of information and solutions to challenges of traditional libraries, such as storage and accessibility. To Baidwan and Tandon (2015); Mairaj and Naseer (2013), the concept of library services has changed from physical to virtual, as libraries are aware of the technological needs of

their users, whose preference to search for information is more inclined to the web or virtual environment than the physical library.

Gowda and Shivalingaiah (2009) establish that the use of virtual resources in a library depends on the type of Information Technology (IT) infrastructure. In a different study, Tlakula and Fombad (2017) found that the awareness, accessibility and level of use of VL was low among undergraduate students. Tlakula and Fombad (2017) further found that students were confused about the difference between library virtual resources and web-based internet sources, which could be due to the fact that training was mostly once-off during orientation in the first year. Similarly, Madukoma (2015) found a limited level of awareness of virtual reference services among library users at Babcock University. To improve use of virtual services, the study recommended increase in awareness education through various school seminars, use of library and study skills lessons and training of reference librarians on the use of modern library technologies.

Moyo (2008) asserts that in order to fully utilise resources of a virtual library, patrons working in a virtual environment require assistance, which is achieved through virtual reference services. Virtual users become frustrated when they fail to receive assistance, as they are mostly outside the confinement of a physical library they would have been able to physically consult a librarian for assistance. Ashaver and Bem-Bura's (2013) study confirm this statement when they observed students' frustration at the lack of a library staff to assist in a virtual environment. Ashaver and Bem-Bura (2013) thus recommend staff or libraries find a way to assist students to use virtual services whenever required.

There is a divided opinion on the perceived usefulness of academic libraries, especially e-resources. A study by Matusiak (2012) concluded that library users, especially students, perceive academic libraries as not useful. On the contrary, Bakare, Bamigboye and Chiemenem (2015) found that students perceived library e-resources as useful. Assessing library users' perception on library resources and services is of outmost importance (Omeluzor and Akinwoye, 2016), as it determines – to a large extent – the level of information resources

usage in academic libraries, serving as a measuring and evaluation parameter to improve library resources and services (Ashaver and Bem-Bura, 2013).

A library (physical or virtual) exists to meet the information needs of its users through the provision of timely, relevant and authentic information. It is, however, important to point out that having a well-resourced library and enabling seamless accessibility to these resources does not guarantee optimal use, as intended users' perception may have an influence on its use. This statement is affirmed by Omeluzor and Akinwoye (2016), whose findings infer that users' perceptions influence the use of library resources. Oyewo and Bello (2014) found that virtual resources are not adequately used because undergraduates have negative attitudes towards them. To maximise the use of virtual or online learning resources, their study recommends improved training on computer literacy skills for students, and that library staff should encourage students to effectively use virtual or online resources.

The constraints of students to access and use virtual or electronic resources, as observed by Arshad and Ameen (2018); Oyewo and Bello (2014); Omeluzor and Akinwoye (2016), include cyber restrictions, lack of advanced searching skills, lack of guidance on use, slow connectivity, poor computer literacy skills, lack of awareness and insufficient resources in various study areas. Similarly, Zarghani, Eskrootchi, Hoseini, Noorishadkam, Golmohammadi and Mostaghaci (2015) attribute the inadequate use of virtual libraries to the lack of awareness about their existence.

Methodology

Applying the quantitative research approach, 287 participants (286 students and one librarian) were chosen from a population of 1 001. The population consisted of 1 000 Faculty of Education students and one librarian from the Dorado-City campus of the International University of Management (IUM). The Faculty of Education was selected on the basis that it has the largest number of students in the institution. Conversely, Dorado-City campus was suitable for the study because it has the largest number of education students and these students have more access to Internet facilities than other campuses and can therefore access VLs. The sample of 286 was

determined by applying Slovin's sample deterministic formula, $n = N / (1 + N (e)^2)$, with an error margin of 5%.

Using the non-probability sampling technique, one librarian and 286 students were purposively selected. The librarian was interviewed and the self-administered questionnaire was handed out to students. The librarian was purposively selected on the basis that she was responsible for attending to virtual reference services and training users on virtual services; hence, she is knowledgeable on the nature of VL activities and related student issues. To confirm some of the issues raised by the librarian in the interview session, the researchers attended some training sessions to observe the librarian training on the VL and how students responded. At random, the researchers observed a cross section of the participants using the VL. Using a cross section of the sample and observing them at random was necessary to prevent the researchers' presence from influencing the behaviour of the participants. Furthermore, the data were gathered by administering the questionnaire to the 286 participants. The questionnaire mostly comprised closed-ended questions and a few open-ended questions.

It is worth mentioning that before the data collection instruments (interview protocol, questionnaire and observation checklist) above were applied, the researchers tested the validity and reliability of these instruments through a pilot study, consisting of 35 undergraduate students. Items tested in the pilot study included comprehension of the items on the data collection instruments, the level of difficulty of the questions of the instruments and interpretation of the items of the instruments.

Results and Discussions

Out of the 286 participants, 206 participants responded to the questionnaire, which amounted to a 72% response rate. Since the response rate was above 50%, it was representative enough of the sample's position on the items under study. This is confirmed by Mugenda and Mugenda (2013), who stated that a response rate above 50% is appropriate

for statistical reporting.

The results of the data analysis indicated that 96% of the respondents were aware of VLs, 32% of these respondents were made aware of VLs through library orientation, 23% through library training sessions, 16% through library staff, 10% through friends and classmates, 9% through library web pages, 6% through lecturers and 4% through library e-mail alerts/bulleting/posters. It is surprising to note that only 6% of the students were made aware of VLs by lecturers, considering the level (or expected level) of interaction between students and lecturers.

On pattern of use, the study found out that 18.0% of the respondents used the VL daily, 10.2% used it weekly, an encouraging 35.4% of the respondents use the VL several days a week, 5.8% use it monthly, 24.8% used it only when necessary and 4% of the respondents did not respond to this item. The response is promising, as 63.6% of the response is termed acceptable (i.e. daily, weekly and several days in a week). However, it is worth noting and acting on the 32.4% response that falls under the categories of monthly and when necessary.

EBSCO Discovery Service was the mainly (30%) used virtual resource, followed by OPAC (26%) and electronic journals (23%). Virtual reference services were the least used (9%) virtual resource. The factors contributing to low usage of virtual reference services were not considered in this study.

The study also sought to examine the location where respondents mostly accessed the VL. The study found that a majority (66%) used the University Library, 8% within the University and 22% indicated that they accessed the VL from home. Others (4%) indicated anywhere including other libraries.

Regarding the purpose for accessing the VL, the four reasons are listed in Table 1. Among these four, 52% of the respondents indicated completing assignments as their preferred purpose for using VLs; 72% indicated finding personal information was their least purpose for using the VL. Similar findings were reported by Okongo (2014). Table 1 below presents the finding.

Table 1: Purpose and preference for using the VL

Respondents' Preference	Purpose			
	Research assignments	Completing information	Personal assistance	Requesting
Most preferred	71 (37%)	101 (52%)	8 (4%)	10 (5%)
Moderately preferred	86 (44%)	66 (34%)	15 (8%)	31 (16%)
Slightly preferred	26 (13%)	21 (11%)	39 (20%)	83 (43%)
Less preferred	7 (4%)	4 (2%)	60 (31%)	50 (26%)
Least preferred	4 (2%)	2 (1%)	72 (37%)	20 (10%)

Regarding the perception of usefulness, most of the respondents (49.9%), perceived virtual library as useful, 23.7% perceived it as very useful, 22.2% perceived it as fairly useful and 7.2% perceived it as not useful. Despite the fact that this finding is congruent with those of Bakare, Bamigboye and Chiemenem (2015), it contradicts Matusiak's (2012) findings that library users, especially students, do not perceive academic libraries as useful.

In terms of the user friendliness of the VL, 93% of the respondents perceived the VL as user friendly, 33% perceived the VL as very easy to use, 42 % perceived the VL as easy to use, and 18% perceived it as fairly easy to use. However, 7% perceived the VL as not easy to use. The negative or low perception responses (not easy to use) should be acted upon, as it is an indication of underlying factors, such as the lack of training, that influence this perception. A system perceived not easy to use may hinder users from services associated with the system.

Responding to whether the participants received training to access and use the VL, a majority (61.7%) of them, responded 'yes', while 32.5% indicated that they never received training. Notwithstanding that the percentage of respondents who never received training was lower than those who received training; it was still a significant number (32.5%). Regarding the effect of library training, 89% of those who received training indicated that it influenced them to use the VL. In a consistent response, 90% of those who did not receive training indicated that they were VL illiterate and had no information about it.

In terms of the challenges of accessing the VL, 81% of the respondents confirmed they encountered challenges while accessing the VL. The challenges encountered included inadequate computer skills, lack of appropriate training, lack of support from library staff, inadequate computers, internet interruption, restrictions to download certain items and information overload. Among these challenges, inadequate computers in the library and Internet interruption were the most encountered by students. This study confirms the findings of Omeluzor and Akinwoye (2016) on challenges of accessing the VL.

Conclusion

This study investigated the perceptions and use of the virtual libraries by undergraduate students at the International University of Management. The findings revealed that most users were aware of virtual libraries, even though the awareness means differed. The study found that the level of awareness was relatively higher than the use, although the difference was not acute. This implied that the gap between awareness and use could easily be reduced if prevailing challenges were addressed. Furthermore, the study found that the pattern of use varied in terms of frequency, preference and location of access. Most respondents made use of the virtual library several days a week for the purpose of completing assignments and they accessed the virtual library through the University Library. This could be an indication that most users did not have personal computers and Internet outside the University, or that they prefer to use the library in between their classes.

Findings also revealed that most respondents perceived the virtual library as useful and easy to use, although a few of the respondents perceived it differently.

Recommendations

Based on the prevailing challenges of virtual library adoption, access and usage, this paper makes the following recommendations:

- Libraries need to employ marketing and promotion strategies, regular awareness sessions, offer regular information literacy training, have collections that are dynamic and capable of meeting the information needs of the students so as to realise adoption and optimal usage of the VL.
- The University Management should work at improving the Information Technology infrastructure, including internet in order to enable smooth access and use of the VL.
- Though this study addressed the knowledge gap that existed on the IUM virtual library user behaviour, future research studies that focus on a different group of library users like the postgraduate students, part-time students or the faculty should be undertaken to get further insight into library user behaviour.

References

- Ape, R. (2011). Information Communication Technology (ICT) and Libraries, In Ape, R. (Ed), *Modern Library Instruction for Higher Education*. Makurdi, NG: Midan Enterprise, pp. 85-100.
- Arshad, A., and Ameen, K. (2018). Academic Scientists' Scholarly Use of Information Resources in the Digital Environment: Perceptions and Barriers. *Global Knowledge, Memory and Communication*, 67(6/7), 467-483.
- Ashaver, D., and Bem-Bura, M. D. (2013). Students' Perception of Library Services in Universities in Benue State. *IOSR Journal of Research and Method in Education*, 1(5), 41-48.
- Baidwan, K. and Tandon, D. (2015). Virtual Reference Services in PGIMER Library: User and Library Staff Point of View. *International Journal of Next Generation Library and Technologies*, 1(1), 123 -130.
- Bakare, D. O., Bamigboye, B. O., and Chiemenem, M. C. (2015). Students' Perception of E-Resources in an Academic Library: The Federal University of Agriculture, Abeokuta Experience. *Information Impact: Journal of Information and Knowledge Management*, 6(1), 105-116.
- Burke, M. (2009). E-Libraries and Distance Learning. In M. Khosrow-Pour, D.B.A. (Ed.), *Encyclopaedia of Information Science and Technology, Second Edition*. Hershey, PA: IGI Global, pp. 1349-1353. doi:10.4018/978-1-60566-026-4.ch213
- D'Angelo, B. J. (2001, September). Assembling and Managing Virtual Libraries. *Information Today*, 37 (5), 1.
- Gapen, D. Kaye. (1993). The Virtual Library: Knowledge, Society, and the Librarian. In Saunders, Laverna M. (Ed.), *The Virtual Library*. Westport, CT: Meckler, pp. 1-4.
- Gbaje, E. S. (2007). Implementing a National Virtual Library for Higher Institutions in Nigeria. *LIBRES: Library and Information Science Research Electronic Journal*, 17 (2), 1-15.
- Gowda, V., and Shivalingaiah, D. (2009). Attitude of Research Scholars towards Usage of Electronic Information Resources: A Survey of University Libraries in Karnataka. *Annals of Library and Information Studies*, 56 (3), 184-191.
- Kaur, A. (2015). Role of Virtual Libraries in Learning Process. In S. Thanuskodi (Ed.), *Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries*. Hershey, PA: IGI Global, pp. 42-52. doi:10.4018/978-1-4666-8178-1.ch003
- Koganuramath, M. (2007). Virtual Library: An Overview. *INFLIBNET*, 535-542. [Online] <http://hdl.handle.net/1944/1430> [Accessed 20 January 2019].

- Madukoma, E. (2015, August). *Users' Perception of Electronic Reference Services in Babcock University Library, Ilishan-Remo, Ogun State, Nigeria*. Paper Presented at the IFLA WLIC Conference, Cape Town, South Africa. [online] <http://library.ifla.org/id/eprint/1302> [Accessed 5 March 2019].
- Mairaj, M. I., and Naseer, M. M. (2013). Library Services and User Satisfaction in Developing Countries: a Case Study. *Health Information and Libraries Journal*, 30 (4), 318-326. doi: 10.1111/hir.12038
- Moyo, L. M. (2008). The virtual Patron. *Science and Technology Libraries*, 25 (1-2), 185-209.
- Mudhol, M. V., and Vasanth, N. (2009, December). The Virtual Library: Virtually a Reality? In *Second International Conference on Computer and Electrical Engineering*. 2, pp. 283-285. doi: 10.1109/ICCEE.2009267
- Mugenda, O. M. and Mugenda, A. G. (2013). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Kenya: ACTS Press.
- Namugera, L. (2017). Users' Awareness, Perceptions and Usage of Makerere Library Services in the Main and Selected Branch Libraries. *Qualitative and Quantitative Methods in Libraries*, 3 (3), 741-758.
- Okongo, A. N. (2014). *Access and Utilization of Digital Information Services in Academic Libraries: The Case of University of Nairobi* (Master's Thesis). University of Nairobi, Kenya.
- Omeluzor, S. U., Akibu, A. A., and Akinwoye, O. A. (2016). Students' Perception, Use and Challenges of Electronic Information Resources in Federal University of Petroleum Resources Effurun Library in Nigeria. *Library Philosophy and Practice (E-Journal)*. 1428. <http://digitalcommons.unl.edu/libphilprac/1428> [Accessed 2 May 2019].
- Oyewo, R. O., and Bello, G. R. (2014). Students' Accessibility and Utilization of Electronic Information Resources in the Library: A Case Study of Selected Monotechnics in Oyo State. *Information Technologist (The)*, 11(1). <https://www.ajol.info/index.php/ict/article/view/109512> [Accessed 6 January 2019].
- Uwakwe, C., Shidi, H., and Abari, G. M. (2016). Perception of Library and Information Science Students on the Use of Virtual Library at the Benue State University Library. *Journal of Advances in Library and Information Science*, 53(1), 89-95.
- Veeranjaneyulu, K., Jadhav, V. S., and Devi, Y. U. (2015). Role of Academic Librarians in the Virtual Library Environment. *Indian Journal of Information, Library and Society*, 28 (1-2), 4-11.
- Verma, M. K. and Verma, N. K. (2014). Concept of Hybrid, Digital and Virtual Library: A Professional Approach. *InfoLib*, 7 (14), 19-23.
- Zarghani, M., Eskrootchi R., Hoseini A. F., Noorishadkam M, Golmohammadi A., and Mostaghaci M. (2015). Virtual Library: An Essential Component of Virtual Education. *Journal of Medical Education and Development*. 10 (1), 36-46.
- Lucy Kiana** is currently Acting University Librarian working for the International University of Management (IUM), Namibia. She holds a Master of Library Science from the University of Central Nicaragua, Bachelor of Technology Information Studies and a Diploma in Information Studies from the Technical University of Kenya.



Martin Mabeifam Ujakpa is currently a Senior Lecturer and the Dean of the Faculty of Information and Communication Technology (ICT) at the International University of Management (IUM), Windhoek, Namibia. He is also a doctoral candidate at the Durban University of Technology (DUT), South Africa. He was previously with the Ghana Technology University College (GTUC) as a lecturer and Head of Academics, Accra Institute of Technology (AIT).

