

Internet Usage and User Satisfaction with Library Services in Federal University Otuoke Main library

Luqman Ayanlola Atanda

Main Library

Federal University Otuoke

Bayelsa State, Nigeria.

atandala@fuotuoke.edu.ng

Abstract

This study investigates the influence of Internet usage on user satisfaction with library services in Federal University Otuoke, Bayelsa State, Nigeria. Three research question and three hypotheses were formulated as a guide to the study. Ex-post facto survey design was used in carrying out the study. A sample size of fifty (50) 100 level students was randomly selected from the population of seventy three (73) library registered students using random sampling technique. Questionnaire titled "Internet Usage on User Satisfaction with Library Services Questionnaire (IUUSLSQ)" was used for data collection. Data generated were analysed using mean and standard deviation scores for answering the research questions while t-test was used in testing the hypotheses. Finding of the study revealed that the usage of e-mail, database and website have significant influence on students' satisfaction with library services. Based on the findings, the researcher recommends that library should create website that are attractive, users-friendly and easy to access for the students and other users; library authorities should create easy access points, educate users on how to exploit these access points to encourage them to visit the library more frequently, stay longer and have easy access to the materials in the library vis-a-vis their satisfaction with services rendered by the library.

Keywords internet, user satisfaction, library services, university, main library.

Introduction

Internet has become an integral part of library and information centres that helps in meeting the information requirements of the users in a timely manner. The library and the internet are being viewed increasingly as a versatile unified system, providing an enormous variety of materials in different formats. The internet and its successor technologies will have the essential features of a massive library system, where people can roam through the electronic equivalent of book stacks, with assistance from the electronic equivalent of reference librarians. In short, one major reason why characteristics of the internet are so compatible with those of universities academic libraries is that some of the internet's most significant capabilities resemble, and dovetail with the capabilities of university academic libraries.

The academic library is the heart of the educational institution. It plays a vital role in the educational process as it actively performs activities related to learning and teaching, research, generation of new knowledge, dissemination of research result and conservation of knowledge, ideas along with extension services. The library is an essential unit in a tertiary

educational institution. It is a repository of knowledge and a dynamic social institution. As indispensable resource centre for reliable information meant to preserve the recorded knowledge of man for use.

Aina (2004) states that libraries are concerned with the collection, processing, storage and dissemination of recorded information for the purpose of reading, study and consultation. The author added that for any library to attain these goals, many activities are performed by the library which translates to library and information services. The academic library is an important unit in the academic community. It is meant to be so as it facilitates the information and educational needs of both staff and users of the library. Library services are activities that the libraries and their personal render to meet the information needs of their users. Such services are core and traditional library services.

Just as the academic is an extremely powerful instrument for learning, so too is the Internet. Internet is considered as a great information source to the academic and research community and also a great information tool to the library and information centres to supplement their information support to the user community. Today internet has greatly changed the face of library services (Morgan, 2010). The author further states that Internet is the major resources for librarians. Application of Internet has contributed to the improvement in provision of quick, quality services in the libraries. Another impact is remote access of variety of commercial and non-commercial information sources i.e. online full text database, e-journals, e-books, library catalogue, online public access catalogue (OPAC) etc. The present day information seekers can access the world wide information through internet on their desktop without any time limitation.

Federal University Otuoke main library like every other academic library is meant for research, reading, consultation, and reference purposes. Students' satisfaction of the library services is the pride and happiness of the librarians and the entire university community since the library is meant for them. The extent to which the academic library is satisfactory to the students is a function of the services rendered by the library.

In this era of information and communication technology, every student expects the academic library to be connected to the Internet for ease of accessibility of information sources. According to Ahmed (2010) a library is viewed as being functional if it is able to satisfy the user's information needs. The author further states that libraries in this age must be connected and techniques are being used by libraries for information processing, storage, communication, dissemination and automation among others.

Academic libraries must take the initiative to use the Internet operations thereby making the internet an integral part of the library's infrastructure. This is because there is a gradual shift in the search for resources by user for research purposes. Many students depend solely on materials found on the internet. It is against this background that the researcher intends to conduct a study to examine the influence of internet use and user satisfaction with library services in Federal University Otuoke main library.

Statement of the Problem

User satisfaction of university library services has become an imperative concern in recent times. There is no doubt that satisfaction of library services influences the degree in which the services are used and it has been found to be an important factor that affects the use or non-use of library services personal observation by researcher revealed that most students depend on their phones and laptops for satisfaction of their information needs not minding the cost associated with it. In the Federal University Otuoke Main Library, despite the usefulness of Internet in performing library services, the use of Internet has been very low. Students are not given the chance to access the library Internet personally unless the use their own computers and must have registered with information and communication technology department of the University. This inadequate utilization of internet has deterred students from enjoying the library services. For instance, in the reference section, user have to spend several minutes to locate where their needed text are located, whereas this should have been done with the touch of a single key on the computer.

It is against this backdrop that the researcher decided to investigate the impact of internet use on library services and user satisfaction in the Federal University Otuoke main Library.

Objectives of the Study

- To determine the influence of e-mail usage on user satisfaction with library services.
- To determine the influence of database usage on user satisfaction with library services.
- To determine the influence of website usage on user satisfaction with library services.

Research Questions

- Is there any influence of e-mail usage on user satisfaction with library services.
- Is there any influence of database usage on user satisfaction with library services.
- Is there any influence of website usage on user satisfaction with library services.

Research Hypotheses

Hypothesis 1: There is no any significant influence of e-mail usage on user satisfaction with library services.

Hypothesis 2: There is no any significant influence of database usage on user satisfaction with library services.

Hypothesis 3: There is no any significant influence of website usage on user satisfaction with library services.

Significance of the Study

The finding of this study is significant to librarians, students, the university community and National University Commission. The librarians through the findings of this study will see the reason why they should adopt and use the internet in the discharge of their services.

This study will also benefit the students, in that it will create more awareness about the library, encouraging a better and an appreciative usage.

The university community and authority will see the need to assist government in equipping the library to meet the needs of the students.

The findings of the study will serve as a pointer to the National University Commission on those facilities to check before issuing accreditation to most courses in the Nigeria universities.

The federal government will also see how important this facet of technology is and reason for adequate funding should be procured for its full implementation.

Limitations of the Study

This study is delimited to the influence of internet uses such as e-mail, database and website on user satisfaction with library services in the federal university otuoke main library. The study considered only the undergraduate students in the Faculty of Education, Federal university Otuoke, Bayelsa State, Nigeria. Only students in year one were used for the study.

Review of Related Literature

Influence Internet usage on Library Services

The advent of information society can be traced to 1960s when a shift occurred from the industrial processes to a service based economy. Since 1960s, libraries worldwide have been using technology in general and computers to automate the administrative and technical tasks of the library (Raman, 1998). In Nigeria, computerization of library had started in year 1955

at Nigeria Statistical Institute, Calcutta. Every facet of library work, in academic, school, public, and special libraries is being transformed as a result of technological advances. Among the changes are: increased database access through CD-ROMs, local mainframes, or dial-up services; a shift in the focus of library instruction toward skills for using computer-based information systems; and the provision of access to local collections for users, and to remote collections for local users.

Libraries in Nigeria have struggled with many problems, but recent government support for research has provided an opportunity for the development of library services and increased access to information. Ashraf (2008), Government encouragement of funding of private organizations through tax benefits has also led to investment in libraries and information as part of research activities. The internet, especially WWW has given the librarian a new dynamic role to play in the society and serve the new information base in better ways than ever before, because of the powerful features of web i.e. distributed, heterogeneous, collaborative, multimedia, standards and protocols, architecture, world wide web has revolutionalized the way people access information and has opened up new possibilities in areas such as digital libraries, virtual libraries, efficient information retrieval and dissemination.

Libraries are using the information technology in general and to automate a wide range of administrative and technical process, build databases, networks and provide better services to their users. The use of information technology becomes imperative for the efficient management of modern libraries. Library automation is one of the major applications of information technology in libraries. It has helped to change the libraries in-house settings (Acquisition, Processing, Indexing, Serial control, Circulation, Reference etc) from manual system to automation (Venkataraman, 2008). In 1990s, most of the libraries have computerized their in-house settings. Recently, libraries have to implement increasingly complex solutions that involve distributed networking and access to remote information resources. The use of information technology in the libraries has tremendously increased due to its enhanced user satisfaction, cost effectiveness, faster and simpler programmes, rapid communicative interaction and easier operational procedures (Storey, 2005).

Effective use of internet in libraries increase efficiency in operations, eliminates repetitive nature of works, improves the quality and range of services, facilities ease and wider access to all kinds of information sources, facilities faster information communication, increase

moral and motivation of library staff, facilities cooperation and resource sharing, save time, space, improves productivity and image of library (Venkataramana, 2008).

The electronic resources that are available in the libraries are an outcome of the advances in both computer technologies, including information storage and delivery mechanism, and software providing user friendly interfaces. In most libraries in the western countries, Online Public Access Catalogues (OPAC) have almost replaced card catalogues, offering enhanced search capabilities for searching the collection of library. Many libraries also provide a web interface to their library and information system, often including direct links of electronic journals, books and internet resources (Cholin, 2005).

The growth of information and the dependency on it have paved way for the information society and subsequently the knowledge society. Information has always been prime factor for the development of society and is often regarded as important national resources. Information services try to meet this objective. Information has become an important part of our lives and should be available when needed. Information services are generated using new tools and techniques to facilitate the right users to the information (Khodeh and Dhar, 2002). The implementation of information technology in the libraries has demanded new forms of library services to get more user satisfaction. Digital library service has evolved after the implementation of internet in the library and information centres. Information technology has had a significant impact and has successfully changed the characteristics of information services being generated in libraries. The past two decades have seen great changes in library due to information technology. The technological advancement have made the significant impact on the growth of knowledge and unlocking of human potential. In library, the impact is clearly visible on information resources, services and people (Manjunatha, 2007).

One of the distinct gifts of information technology has been the invention of devices with huge storage capacity. CD-ROM's and flash memory cards have changed the face of libraries. Online access to information has turned many libraries into Virtual Libraries (Mishra, 2001). Now libraries are changing the way in which information is stored and disseminated to users. The next benefit of internet is the automation of library activities. Many in-house operations in the library like acquisition, processing, circulation, maintenance, serial management are changed from manually to automation. The need for automation arises to reduce the effort and time required for these jobs. Now much software are available in the market for library automation. Internet has helped in establishing library networking and resources sharing through internet and intranet. Library networks have expanded the

limitation of the scope of resource sharing and information exchange. Today internet is the major resource for librarians. Application of internet has contributed to improvement in provision of quick, quality services in the libraries. Another impact is remote access of variety of commercial and non-commercial information sources i.e. online full text databases, e-journals, e-books, library catalogue etc. The present day information seekers can access the worldwide information through internet on their desktop without any time limitation.

E-mail usage on User satisfaction with Library services

Lawton (2004), the internet is a global network. It connects users over the world and is used to find and exchange information as well as to send and receive e-mails. The internet is not purely a source of information, however it is also a means of communication and many users will want to use it to send and receive messages. Allowing users to set up personal e-mail accounts (e.g. atandala1000@yahoo.com) on library computers can be administratively and financially problematical and is seldom done in public libraries, although as networked services become more common and users' demands more sophisticated, this situation may change. If people are prepared to pay for this sort of service it could become a good income generator (Harden, 2011).

According to Ormes (2012), it is also possible to send information through an internet browser, although mail can be sent, there is no way to receive a reply as browsers have a general rather than a person-specific e-mail address. It is not therefore satisfactory for users except for those users who have their own e-mail accounts elsewhere and wish to send information to themselves without the need to download or print in the library. Also, people could send e-mail which would appear to have been sent by the library, and it would be virtually impossible to control what was sent, or track down who sent it after the event. For these reasons many libraries do not configure their web browsers to allow mail. However, e-mail is not just for personal correspondence. It is also a means of obtaining information. Online book groups for example run on e-mail as do many support groups, for example, cancer sufferers. And if the library supports lifelong learning it may want to allow learners to contact tutors and fellow students (Ormes, 2012).

Database usage on User satisfaction with Library services

The most effective way to provide access to electronic books/journal in university libraries is through subscription to online databases which can be accessed through the internet.

Databases are a collection of electronic information sources by publishers from various fields and disciplines (Afolabi, 2007). Some of these databases are provided free of charge to libraries in developing countries by their publishers or vendors. Some of these include NARI, <http://healthininternetnetwork.org/scipub.php>, AGORA, <http://www.agininternetnetwork.org/en/>. Access to these databases provides researchers and students with thousands of scholarly articles in their fields of specialization or research (Ellis and Oldman, 2005). For students to utilize the growing range of electronic resources they must acquire and practice the skills necessary to exploit them (Covey, 2002).

Website usage on User satisfaction with Library services

The World Wide Web became a significant vehicle for distributing information. Information technology has emerged as the most potent tool to collect, organize, and disseminate information to the people at large scale through communication network. Internet brought the biggest change in libraries as 1990s saw the rapidly increasing availability of access to computers generally. The information and communication technology have brought revolutionary changes in handling delivering and storage of information. The transition of traditional library collections to digital or virtual collections presented the librarian with new opportunities and challenges.

Creating a library website (www.fuolibrary.edu.ng) opens up endless possibilities for providing resource based and interactive services such as local information, what is on book review, online magazines, quizzes, online surveys, local history materials, booklists, and discographies and so on. Twenty-four hour access to a virtual library can be made possible (Harden, 2011). As stated by Harden (2011), publishing on the web is getting easier with software which can convert text into html (hypertext marked up language) automatically. However, content is not the only consideration. The site needs to be attractive, user-friendly, and easy to navigate. Online tutorials and help pages may be needed, especially for times when staffs are not on hand. Information technology units in local authorities have experts in web design, or the expertise could be brought in. However, there is an opportunity here for the library to take the lead in designing a corporate website for the whole authority. Examples of good academic library website can be found by looking at the EARL web awards (EARL Best on the Web Awards 1998).

Theoretical Framework

Technology Acceptance Model 1989

The Technology Acceptance Model (TAM) was developed by Davis in 1989. TAM provides an explanation on the determinants of technology acceptance that is generally capable of explaining user's behaviour. It explains the attitudinal, social, and control factors that affect Internet usage. He stated that usage of an information system is determined by users' intention to use the system, which in turn is determined by users' beliefs about the system.

The basic elements of the Technology Acceptance Model (TAM) to this study are:

- Perceived Usefulness
- Perceived ease of use

Perceived usefulness is the extent to which a person believes that using the system will enhance his job performance. Perceived ease of use is the extent to which a person believes that using the system will be free of effort. Although perceived usefulness has a direct effect on adoption intention, perceived ease of use which could come as a resultant effect of the students' computer self-efficacy or attitude towards the use of the system, has both a direct effect and an indirect effect on intention. This theory also explained that perceived usefulness and perceived ease of use will have a significant impact on a user's attitude towards the use of the system which may be feelings of favourableness or unfavourableness towards the system. A user who could not see the usefulness of the use of information technology facilities or sees the use of computer technology as a very difficult task will manifest a negative behavioural attitude towards the use of information technology facilities or computer technology in retrieving information for use in research and other academic activities.

Similarly, a user who has low computer self-efficacy will also not perceive the use of the facilities easy since its use entails manipulating the computer. The implication here is that users' attitude towards the use of Internet facilities and their computer self-efficacy which respectively, reflects the perception and belief on one's capability, will enhance performance and use of resources accessed electronically, via technological facilities.

Research Methods : Design of the Study

The researcher will employ an ex-post facto survey design in conducting the study. According to Udoh and Joseph (2005), ex-post facto survey is useful when a researcher wants to conduct a study on an existing phenomenon using questionnaire to gather data from a sampled population. In this case, the design helped the researcher to use questionnaire to gather data from the students and describe their opinion on internet usage on user satisfaction with library services in the Federal University Otuoke main library. The researcher decided to

use this design due to the Federal University Otuoke mail library is an existing one which the researcher only had to gather data based on that.

Area of the Study

The area of the study is the Federal University Otuoke, Bayelsa State, Nigeria. Specifically, the study will cover only the Federal University Otuoke Main Library. Bayelsa State is one of the states in South South geo-political zone in Nigeria.

Population of the Study

The study population will comprise only seventy three (73) registered students in the Faculty of Education, Federal University Otuoke. The researcher decided to use these students based on the fact that they are still in school and to make use of the library and library resources during their academic and research work.

Sample and Sampling Techniques

Total number of fifty (50) registered library users among 100 level students of the Faculty of Education of the Federal University Otuoke in Bayelsa state, Nigeria will be use for the study. The students will be selected by using random sampling technique. By using this technique, the researcher will be randomly pick those students and give them the copies of the questionnaire to complete. In this case, copies of questionnaire will be administered to the students when they visit the library.

Instrument for the Study

Questionnaire titled “Internet Usage on User Satisfaction with Library Services Questionnaire (IUUSLSQ)” will be use for the data collection from the students. The questionnaires which will be dividing into three sections contain 19 items. Section A will be basically on respondent’s demographic information. Section B will be on the Internet Usage and Library Services with 12 items. The items were scored using 3 point scale option of Strongly Agreed (SA), Agreed (A), and Not Agreed (NA). Section C contained 6 items on user satisfaction scored using Very Satisfied (VS), Satisfied (S), and Not Satisfied (NS).

Method of Data Analysis

The researcher adopted mean and standard deviation in answering research questions, while the dependent t-test was used in testing the hypotheses. Dependent t-test was useful for this as the researcher was testing influence between Internet usage and user satisfaction with library services.

Presentation of Data and Result

Answering of Research Questions

Research Question 1: How does e-mail usage in the library services influence user satisfaction?

Table 1: Mean and Standard Deviation of E-mail Usage on Library Services and User Satisfaction.

Variables	X	SD	N
E-mail usage on Library Services	11.78	6.67	140
User Satisfaction	18.84	7.50	

The result as shown on Table 1 shows a mean score of 11.78 and standard deviation score of 6.67 with the mean score of 18.84 and standard deviation score of 7.50 for user satisfaction. The two mean scores are found to be greater than the cut-off scores of 2.5. From the result, it infers that e-mail has influence on library services and user satisfaction.

Research Question 2: How does database usage in the library services influence user satisfaction?

Table 2: Mean and Standard Deviation of Database Usage on Library Services and User Satisfaction.

Variables	X	SD	N
Database usage on Library Services	10.23	8.81	140
User Satisfaction	18.84	7.50	

Data analysis on table 2 reveals mean score of 10.23 and standard deviation score of 8.81 for database usage on library services and mean score of 18.84 and standard deviation of 7.50 for user satisfaction. The mean scores are found to be greater than the cut-off mean score of 2.5. The result shows that database has an influence on library services and user satisfaction.

Research Question 3: How does website usage in the library services influence user satisfaction?

Table 3: Mean and Standard Deviation of Website Usage on Library Services and User Satisfaction.

Variables	X	SD	N
Website usage on Library Services	12.61	5.54	140
User Satisfaction	18.84	7.50	

Data analysis as presented on table 3 shows a calculated mean score 12.61 and standard deviation 5.54 for website usage on library services respectively and mean score of 18.84 and standard deviation of 7.50 for user satisfaction. The mean score of website usage on user satisfaction with library services is greater than the cut-off score of 2.5. The result therefore shows that website usage influence library services on user satisfaction.

Testing of Hypotheses

Hypothesis 1: There is no significant influence of E-mail usage on user satisfaction with library services.

Table 4: Dependent t-test Analysis of E-mail usage on library services and User Satisfaction.

Variables	\bar{X}	SD	t-cal	df	t-cri	N
E-mail on Library Services	11.78	6.67	8.85*	138	1.98	140
User Satisfaction	18.84	7.50				

*Significant at .05 alpha level

The result as shown on table 4 shows a calculated t-value of 8.85 and a critical t-value of 1.98 when compared at .05 level of significant and 138 degree of freedom. Since the calculated t-value is greater than the critical value the null hypothesis which is stated that there is no significant influence of e-mail on library services and user satisfaction is rejected, while the alternative hypothesis is retained. This shows that the use of e-mail on library services has a significant influence on user satisfaction.

Hypothesis 2: There is no significant influence of database usage on user satisfaction with library services.

Table 5: Dependent t-test Analysis of database usage on library services and User Satisfaction.

Variables	\bar{X}	SD	t-cal	df	t-cri	N
Database usage on Library Services	10.23	8.81	9.02*	138	1.98	140
User Satisfaction	18.84	7.50				

*Significant at .05 alpha level

Data analysis as presented on table indicates a calculated t-value of 9.02 and a critical t-value of 1.98 at .05 alpha levels and 138 degree of freedom. Since the calculated t-value is greater than the critical t-value then the null hypothesis which predicted that there is no significant influence of database usage on users' satisfaction is rejected. This infers that database usage has a significant influence on users' satisfaction.

Hypothesis 3: There is no significant influence o website usage on user satisfaction with library services.

Table 6: Dependent t-test analysis of Website usage on Library services and User Satisfaction.

Variables	\bar{X}	SD	t-cal	df	t-cri	N
Website usage on Library Services	12.61	5.54	6.43*	138	1.98	140
User Satisfaction	18.84	7.50				

*Significant at .05 alpha level

Data analysis as presented on table 6 shows a calculated t-value of 6.43 and a critical t-value of 1.98 when compare at .05 significant levels with 138 degree of freedom. This implies that creating library website usage has influence on users' satisfaction with library services.

Discussion of Findings

Finding of the study revealed that e-mail usage on library services has significant influence on users' satisfaction with library services. The finding is in line with the finding of Garnsey and Powell (2000) who maintained that the use of e-mail reference services in libraries helps in user satisfactory utilization of libraries. The authors emphasised ease and convenience as the major reasons for using such services and that users were mostly satisfied with what they received.

Finding of this study revealed that database usage on library services has a significant influence on users' satisfaction. This implies that the usage of database services in the library influences the user satisfaction of the library services. The finding is in support of finding of Ukachi (2008), which showed that the use of database on library services has influence on students' satisfactory utilization of the library.

Finding revealed that website usage in the library has a significant influence on users' satisfaction with library services. The finding infers that library website could encourage users to utilise the library and also derived satisfaction from its services. This finding is in line with the finding of Harden (2011) who stated that creating a library website opens up endless possibilities for providing resource based and interactive services such as local information, online magazines, quizzes, online surveys, local history materials, booklists, and so on. Twenty-four hour access to a virtual library can be made possible (Harden, 2011). As stated by Harden (2011), publishing on the web is getting easier with software which can convert text into HTML (Hypertext markup language) automatically.

Summary, Conclusion and Recommendations

Summary

This study examined influence of Internet usage on library services and user satisfaction in academic library in Federal University Otuoke, Bayelsa State, Nigeria. Three research questions and three corresponding hypotheses were formulated as a guide to the study. Questionnaire designed by the researcher titled "Internet Usage and User Satisfaction with Library Services Questionnaire (IUUSLSQ)" was used for data collection. Data collected were analysed using mean, standard deviation and t-test. Finding of the study revealed that the usage of e-mail, database and website has significant influence on students' satisfaction with library services.

Conclusion

Libraries are using information technology to automate a wide range of administrative and technical processes, build databases, networks, and provide better services to their users. Internet services in libraries help in performing operations and services efficiently. The application of internet and accessibility of internet facilitates the free flow of information, creative expression, and effective management.

E-mail services influences library services and promote users' satisfaction. Database in library services has significant influence on users' satisfaction. Creating of website in library has significantly influence on user's satisfaction with library services.

Recommendations

The recommendations of this study based on the findings as follow:

- Network and related online facilities should be available in the library to attract more information seekers and users since the need for connectivity can no longer be ignored in this era of information and communication technology.
- Academic libraries should be stocked with up-to-date information resources to encourage users and outdated/obsolete resources should be weeded regularly. Electronic resources should be included.
- The librarian should also propose a well-planned user instruction and information skill programme in an update technology environment with at least with at least 100 computers with internet access, network CD-ROMs access to the audio-visual gadgets needed for a hand on information search experience.
- Library authorities should create easy access points, educate users on how to exploit these access points to encourage them to visit the library more frequently, stay longer and have easy access to the materials in the library vis-a-vis their satisfaction with services rendered by the library.
- Library should create websites that are attractive, users-friendly and easy access for the students and other users.

References

- Afolabi, M.O. (2007). Paper presented at Electronic Information for Libraries Network (elFL.net) workshop, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Ahmed, P. (2010). Impact of Information and Communication Technology in library management and maintenance. *Journal of Information and Communication Technology*, 3(2): 67-68.
- Aina, A. (2004). Library Use and Internet Services in Universities. *Journal of Information Sciences*, 2(5): 78-83.
- Ashraf, T. (2008). Implications for Library and Information Services: Study of Nigeria's IT Revolution and public policy. In Sahu, (Ashok) *Information Management in new millennium: Opportunities and challenges for library professions*, New Delhi: Ess Ess Publication.
- Cholin, V.S. (2005). Study of the application of information technology for effective access to resources in Nigerian Universities libraries. *The International Information & Library Review*, 37: 189-197.

- Covey, D.T. (2002). Usability and Usability Assessment: Library Practices and Concerns. Council on Library and Information Resources. Retrieved on: 14/04/2014, Available at: <http://www.clir.org/pubs/reports/pub105/contents.html>
- EARL Best on the Web Awards (1998). <http://www.earl.org.uk/bestonweb/1998.html> on 22/5/2000
- Ellis, D.O. (2005). "The English literature researcher in the age of Internet". *Journal of Information Science* 31:1.
- Fitzsimons, J.A. and Fitzsimons M.J. (2000). *Service Management: Operations, Strategy, and Information Technology*, (3rd ed.) Boston: McGraw-Hill.
- Garnsey, B.A. and Powell, R.R. (2000). Electronic mail reference services in the public library.
- Harden, R. (2011). Collecting internet resources. Retrieved from <http://www.earl.org.uk/issuepapers/collect.html> on 12/6/2013
- Ikenwe, I.I. and Adegbilero, I. (2010). Utilization and User Satisfaction of Public Library Services in South-West, Nigeria in the 21st Century. *Journal of Library and Information Science*. 9(1): 45-48.
- Khode, S. and Dhar, U. (2002). "Library services and functions in changing environment – An overview". *Nigerian Journal of Information, Library and Society*. 15(1&2): 24-29.
- Lawton, T. (2004). *IT Principles: for Office XP Level 1*. Oxford: Heinemann Educational Publishers.
- Manjinatha, K., Pai, R.D. and Mathew, S.K. (2007). Impact of Technology on quality of services in technical and management libraries. Karnataka: manipal, T.A.Pai Management Institute.
- Mishra, K. (2001). Management education tyranny of the status quo: Challenges and opportunities for management librarians in the new millennium. In: Gaur, Ramesh, & Goyal (Eds.), 2001. *Proceedings of the 2nd National Convention of Management Libraries Network (MANLIBNET)* pp. 16-17.
- Morgan, O. (2010). *Internet and information resources*. New Jersey: Prentice-Hall.
- Ormes, S. (2012). An introduction to filtering. Retrieved from <http://www.earl.org.uk/policyissuepapers/filtering.html> on 4/4/2014.
- Ramana, P.V. (2004). *Information technology applications in libraries*, New Delhi: Ess Ess Publications.
- Storey, C. (2005). The impact of information technology on management and organization: the case of Hong Kong Polytechnic University Library. *Library Management*. 16(2) p. 22-33.
- Udoh, A.O. and Joseph, E. (2005). *Foundations of educational research*. Ikot Ekpene: Joe Graphic Publications.
- Ukachi, N.A. (2008). Utilization of information communication technologies (ICTs) in reference services of academic libraries: threat and challenges. *The Information Technologist* 5 (2): 62-69.
- Venkataraman, P. and RAO, C. (1998). Impact of information technology on library operations and services. In B. Satyanarayana (Eds.). *information technology: issues and trends*. New Delhi: Cosmo Publication.