

Information and Communication Technology and Cataloguers Information Needs and Seeking Behaviour in University Libraries in Edo and Delta States, Nigeria

John Odion Oshiotse

Delta state university, Abraka, Nigeria

Osaheni Oni (CLN)

Auchi Polytechnic Library

Auchi, Edo State, Nigeria

chiefonism@yahoo.com

Abstract

This study investigated Information and communication technology and cataloguers' information needs and seeking behaviour in university libraries in Edo and Delta states, Nigeria. The study employed a descriptive survey method and questionnaire was the instrument used for data collection. The population of this study consisted of fifty-two (52) cataloguers in all the university libraries in Edo and Delta States. The population of this study is relatively small and as such the entire population was used as representative sample using purposeful sampling techniques. The researchers visited the sample institutions to administer the questionnaire. It was revealed from the study. The study revealed that Library of congress website, google.com and IFLANET.com are the ICT tools use by cataloguers for seeking information. The study also indicates that cataloguers used information and communication technology to make work done easily and faster, access to current information, professional development, increase work output, Improve my skills in the use of OPAC and improve my knowledge and skills in databases. The study recommended that there should be adequate information and communication technology (ICT) facilities should be put in place by the library managements to enable cataloguers make use of library of congress website, google.com and IFLANET.com as this will enhance the performance of cataloguers in rendering efficient and effective services.

Key words: ICT, Information needs, Seeking behavior, Cataloguers, Universities, Libraries, Edo, Delta, Nigeria

Introduction

According to Kakai, Ikoja-Odongo and Kigongo-Bukenya (2002) considering the rapid changes in information provision in 21st century with computerized access, digitized information formats and plethora of resources on the internet, access and retrieval capabilities of user who are traditionally accustomed to manual information library system is questionable. Ernest etal cited in Oshiotse (2009) noted that to keep abreast of the times, libraries not only have to acquire printed materials, they must also expedite access to internet based information sources for their

users. Creamer as cited by Welsh and Robertson (2007) noted that the greatest change in these environment is the range of skills necessary, as cataloguers no longer solely identify key information by author, title, and pagination, and recording it, but downloading records from large datasets, checking them to meet local requirements. She emphasized that cataloguers are responsible not only for the quality of their own cataloguing and indexing work but for checking and updating the work of others on the internet. She finally noted that the internet has had great impact on data supply and professional development.

In the opinion of Reddy (1972) as cited by Welsh and Robertson (2007) cataloguers professional knowledge is itself constantly updated by access through the internet to Library of Congress website, Web Dewey etc. According to Ernest et al (2005) websites provide very useful information to users on any subject area. In their research on information seeking behavior for recreational activities and its implication for libraries noted websites analysis of three hiking trail. They emphasized that these sites offer information on permit, trail conditions and camping along with a number of link to one another. They also noted a knowledgeable searcher could have gone to two other sites for trail information such as the trails.com, amazon.com. The first “trail.com” (www.trails.com), allows searching of trail nationwide. A keyword search of “Methuselah” retrieves two relevant items, both hiking guide to the region. Listing of hikes can then be examined for each book and a trail description purchase online. A search of these book titles on amazon.com (www.amazon.com) also gives the searcher an opportunity to examine front back cover, tables of contents, indexes etc as well make purchase of the books. Watson (1995) opined that the increase use of information and communication technology (ICT) and the demand for new services require on the part of library administrators to provide consistent and comprehensive training and development programmed for librarians. This training is necessary in order to update themselves with the application of ICT to the issues affecting their work (Bello & Thompson, 2003). The use of ICT and its application to cataloguing processes by cataloguers has not only improved their professional training but also improve on their information search and ICT skills (Metcaife & Martins cited in Oshiotse, 2009). In the opinion of Lambardo and Condic (2000) cited in Oshiotse (2009) the development of second generation online catalogue (OPAC) has launched many search and display features that are beginning to empower cataloguers to manipulate OPAC to meet their needs and that of the patron. In the view of Barry

(1999) Online Public Access Catalogue (OPAC) is now uploaded on the internet and can be searched by anybody all over the world including our entire scientist from their desktop in their offices and at various institutions. This is a challenge to cataloguers to ensure that these information materials uploaded to the internet are adequately organized and updated even on the internet (Nieuwenhuysen, 2004).

Adeyemi (2002) avers that information and communication technology (ICT) enhances efficiency and productivity in cataloguing and authority work is made faster. He further emphasized that it also standardizes efficient cataloguing of records and allows the formation of networks for resource sharing/online access to cooperative databases. He finally noted that ICT has reassigned and retrain staff, replaces card catalogue with OPAC, and cut out the heat and stress associated with traditional method. According to Igbeka (2003) the application of ICT to cataloguing process has helped cataloguers to fill data based on bibliographic description of materials with ease. She noted that this has increase on cataloguers output and efficiency in library services. The foremost benefit of information sought and use is on the improvement of cataloguer's skills and competence in the development of system such as data base (SABINET, 1983). It noted that it has improved cataloguer knowledge on dissemination and sharing of information as well as evaluation of knowledge asset for individual group and organization. Information sought and used by individuals has not only be beneficial in tackling the problems that arises while performing their task but also facilitates professional development (Talja, 1992).According to Lambardo and Condic (2000) the development of second generation online catalog (OPAC) has launched many search and display features that are beginning to empower cataloguers to manipulate OPAC to meet their needs and that of the patrons. The implication of this is that information seeking skills of the cataloguers is enhanced through continuous manipulation of OPAC.

Ikonja-Odongo and Ocholla (2004) posits that there is the need to improve entrepreneur information search skills in order to increase productivity. They further emphasized that entrepreneur will benefit from information sought and use as it will acquit them with new and better methods of resolving their business problem such as planning and taking relevant decisions. Another benefit according to Bello and Thompson (2003), is that it enable cataloguers

exchange ideas and acquisition of new skills, it will also strengthen the cataloguers knowledge and ability to provide quality cataloguing services. Information seeking behavior of the cataloguer will enable his or her seeking strategies, knowledge and skills to adapt to cataloguing practices (Marchionini, 1997). Information sought and used of the cataloguers has provide them with the expertise of providing access to circulation information, status information, holding information, the indexing of special collections and information about serial (Fattahi, 1995). Bryant (1997) avers that it help in facilitating integration of records for older materials with current cataloguing thus improving services. According to Watson (1995) as cited by Bello and Thompson (2003) the advantages are obvious and many, networking and sharing of bibliographic resources, journals and other formats of research resources, it has helped in the design of common software that further encourages the development of expertise and reduce bottlenecks in cataloguing. Cataloguers are now seen as being mediators between computing and cataloguing activities (Butlar & Garcha, 1998).

Statement of the Problem

The advent of information and communication technology (ICT) offers academic library cataloguers tremendous opportunities to unhindered and unrestricted information for smooth, effective and efficient cataloguing and classification of library materials. It is painful to note that there is dearth of cataloguers in many academic libraries. This in most cases is associated with phobia for cataloguing and lack of necessary information to ease cataloguing processes. Information and communication technology offers cataloguers opportunity to have access to cataloguing related information. With necessary ICT skills, cataloguers can now have access to library of congress site and Online Public Access Catalogue (OPAC). According to Alzofon and Van Pulis (1984) highest success rate of using the Online Public Access Catalogue (OPAC) was noticed among cataloguers and users who had formal training and experience in search skills. It is against this background that this study attempts to investigate Information and communication technology and cataloguers' information needs and seeking behaviour in university libraries in Edo and Delta states, Nigeria.

Objectives of the Study

The purpose of this study is to examine the Information and communication technology and cataloguers' information needs and seeking behaviour in university libraries in Edo and Delta states, Nigeria. Specifically, the study wishes to;

- I. investigate the extent information and communication technology enhance cataloguers information needs and seeking behaviour in libraries
- II. determine the benefits cataloguers derive from information and communication technology in their information needs and seeking behaviour in libraries

Research Questions

- I. How does information and communication technology enhance cataloguers information needs and seeking behaviour in libraries?
- II. What are the benefits cataloguers derive from information and communication technology in their information needs and seeking behaviour in libraries?

Research Hypotheses

The following hypotheses are formulated to guide the study.

- I. There is no significant difference between male and female cataloguers in their use of information and communication technology for information needs and seeking behaviour.
- II. There is no significant difference between male and female cataloguers on the benefits derived information and communication technology in their information needs and seeking behaviour

Methodology

This study employed a descriptive design to investigate investigated Information and communication technology and cataloguers' information needs and seeking behaviour in university libraries in Edo and Delta states, Nigeria. This is because descriptive design gives room for studying very small and large population. It enables the researchers to gather data from members of the selected participants with the aid of the questionnaire in order to determine the current status of Gender and Information Seeking Behaviour of Cataloguers in University Libraries in Edo and Delta States. The population of this study consisted of fifty-two (52) cataloguers in all the university libraries in Edo and Delta States. The universities in Edo and Delta States used in this study are

University of Benin, Benin city, Delta State University, Abraka, Ambrose Ali University, Ekpoma, Benson Idahosa University, Benin city and Novena University. The population of this study is relatively small and as such the entire population was used as representative sample using purposeful sampling techniques. Egbule and Okobia (2001) cited in Oni, Odaro-Ekhaguebo, & Akpoduado (2018) posited that the entire population can be studied or investigated when the population is not large, as long as there are enough funds and time to ensure accurate result. This study falls into this category. This study employed the questionnaire as instrument for data collection. The questionnaire was constructed by the researchers. The questionnaire entitled “investigate Information and Communication Technology and Cataloguers’ Information Needs and Seeking Behaviour in University Libraries in Edo and Delta States, Nigeria Questionnaire (ICTCINSBULQ) was used in this study. The researchers visited the sample institutions to administer the questionnaire. The data obtained from the copies of questionnaire retrieved from the respondents were analyzed using simple percentages to answered the research questions and t-test of significant to test the formulated hypotheses. The t-test statistical technique was chosen because the data generated through the questionnaire are frequency data and would ascertain whether or not difference between observed set of frequencies are significant. The calculated t-test value was tested at 0.05 level of significance. The formula for calculating t-test is;

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left\{ \frac{N_1 S_1^2 + N_2 S_2^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 N_2} \right\}}}$$

Results and Discussion

Table1: Gender distribution of respondents

| Gender | No of Respondents | Percentage (%) |
|--------------|-------------------|----------------|
| Male | 29 | 55.8 |
| Female | 23 | 44.2 |
| Total | 52 | 100 |

Table 1 indicates that 29 (55.8%) of the respondents are males while 23 (44.2%) are females. This clearly shows that there are more males cataloguers in these universities libraries than females. This finding corroborates the work of Rose and Fischer (1995) who posited that the African societies are male biased.

Table 2: Working experience of the respondents

| Working experience | No of respondents | Percentage (%) |
|--------------------|-------------------|----------------|
| Below 6 years | 8 | 15.4 |
| 6-10 years | 15 | 28.9 |
| 11-15 years | 9 | 17.3 |
| 16-20 years | 9 | 17.3 |
| 20 years and above | 11 | 21.2 |
| Total | 52 | 100 |

Table 2 indicates cataloguers working experience. It shows that 8 (15.4%) of the respondent have working experience below 6 years, 15 (28.9%) have working experience between 6-10 years, 9 (17.3%) have working experience between 11-15 years and 16-20 years respectively, 11 (21.2%) have working experience of 20 years and above.. From the analysis it is shown that there are a considerable number of cataloguers with working experience who can serve as trainer and guardian to those with fewer years of experience on cataloguing practices. This finding is supported by Bello and Thompson (2003) who noted that it is greater economic benefits to library management to seek cataloguers who have solid work experience, as they could be resourceful mentor/trainer to younger cataloguers on the skills involved in using the various cataloguing tools.

Table 3: Information and communication technologies used by cataloguers to search information

| | SA | | A | | D | | SD | | UND | | Total | |
|---------------|----|-------|----|------|----|------|----|------|-----|------|-----------|------------|
| | No | % | No | % | No | % | No | % | No | % | No | % |
| Google.com | 42 | 80.8. | 8 | 15.4 | 2 | 3.8 | - | - | - | - | 52 | 100 |
| Ask.com | 8 | 15.4 | 11 | 21.2 | 12 | 23.1 | 13 | 25.0 | 8 | 15.4 | 52 | 100 |
| Altavista.com | 8 | 15.4 | 14 | 26.9 | 11 | 21.2 | 8 | 15.4 | 11 | 21.2 | 52 | 100 |

| | | | | | | | | | | | | |
|-----------------------------|----|------|---|------|----|------|----|------|----|------|-----------|------------|
| Webdewey.com | 3 | 5.8 | 9 | 17.3 | 13 | 25.0 | 13 | 25.0 | 14 | 26.9 | 52 | 100 |
| IFLANET.com | 36 | 69.2 | 5 | 9.6 | 9 | 17.3 | 2 | 3.8 | - | - | 52 | 100 |
| Library of congress website | 48 | 92.3 | - | - | 4 | 7.7 | - | - | - | - | 52 | 100 |
| Yahoo | 9 | 17.3 | 9 | 17.3 | 15 | 28.8 | 12 | 23.1 | 7 | 13.5 | 52 | 100 |

SA (Strongly Agreed), A(Agree), D (Disagree), SD (Strongly Disagreed), U(Undecided)

The table above clearly indicates the use of information and communication technology by cataloguers for seeking information. A majority of the respondents strongly agreed that they use Library of congress website with 4(92.3%), google.com with 32 (.76%) and IFLANET.com 36(69.2%). The analysis reveals that the percentage 3(5.8%) of cataloguers that use webdewey.com to seek for information is relatively small or less This may be due to the fact that Dewey decimal classification scheme is not use by academic libraries in Nigeria.

Table 4: Benefits s cataloguers derive from information and communication technology in their information nekkeds and seeking behaviour in libraries

| Benefits | SA | | A | | D | | SD | | UND | | Total | |
|--|----|------|----|------|----|-----|----|------|-----|------|-------|-----|
| | No | % | No | % | No | % | No | % | No | % | No | % |
| Increase work output | 32 | 61.5 | 20 | 38.5 | - | - | - | - | - | - | 52 | 100 |
| Work done easily and faster | 44 | 84.6 | 7 | 13.5 | 1 | 1.9 | - | - | - | - | 52 | 100 |
| Improve my knowledge and skills in databases | 27 | 51.9 | 21 | 40.4 | 1 | 1.9 | - | - | 3 | 5.8 | 52 | 100 |
| Professional development | 33 | 63.5 | 13 | 25.0 | 3 | 5.8 | 3 | 5.8 | - | - | 52 | 100 |
| Improve my knowledge on resource sharing | 16 | 30.8 | 29 | 55.8 | 4 | 7.7 | 2 | 6.90 | 1 | 3.45 | 52 | 100 |
| Improve my | 29 | 55.8 | 18 | 34.6 | 3 | 5.8 | - | - | 2 | 3.8 | 52 | 100 |

| | | | | | | | | | | | | |
|-----------------------------------|----|------|----|------|---|---|---|---|---|---|----|-----|
| skills in the use of OPAC and ICT | | | | | | | | | | | | |
| Access to current information | 34 | 65.4 | 18 | 34.6 | - | - | - | - | - | - | 52 | 100 |

SA (Strongly Agreed), A(Agree), D (Disagree), SD (Strongly Disagreed), U(Undecided)

Table4. Clearly indicates the benefits derived by cataloguers from information and communication technology in their information needs and seeking behaviour in libraries. Strongly agreed that cataloguers used information and communication technology to make Work done easily and faster with 44(84.6%), Access to current information 34(65.4%), Professional development 33(63.5%), Increase work output 32(61.5%), Improve my skills in the use of OPAC and ICT 29(55.8%) and Improve my knowledge and skills in databases 27(51.9%).

Table 5: Summary table of t-test analysis showing male and female cataloguers use of information and communication technology (ICT).

| Gender | N | \bar{X} | SD | DF | t-cal. | t-crit. | Level of significant | Decision | Remark |
|--------|----|-----------|------|----|--------|---------|----------------------|----------|-----------------|
| Male | 29 | 21.14 | 2.70 | 50 | 0.89 | 2.01 | 0.05 | Accepted | Not Significant |
| Female | 23 | 20.44 | 2.88 | | | | | | |

From the result presented in table5 above, the null hypothesis of no significant difference was accepted. This is because the t-calculated of 0.89 is less than the t-critical of 2.01. This implies that there is no significant difference between male and female cataloguers' use of information and communication technology (ICT) in their information needs and seeking behaviour in university libraries.

Table 6: Summary table of t-test analysis showing benefits derived by both male and female cataloguers in the use of information and communication technology

| Gender | N | \bar{X} | SD | DF | t-cal. | t-crit. | Level of significant | Decision | Remark |
|--------|----|-----------|------|----|--------|---------|----------------------|----------|-----------------|
| Male | 29 | 31.21 | 2.40 | 50 | 1.11 | 2.01 | 0.05 | Accepted | Not Significant |
| Female | 23 | 30.70 | 2.33 | | | | | | |

From the result presented in table 6, the null hypothesis of no significant difference was accepted. This is because the t-calculated of 1.11 is less than the t-critical of 2.01. This implies that there is no significant difference in the benefits derived by both male and female cataloguers from information and communication in their information needs and seeking behaviour .

Discussion of findings

The study revealed that Library of congress website, google.com and IFLANET.com are the ICT tools use by cataloguers for seeking information. This finding is supported Ernest etal (2005) also corroborated this by stating that websites provide very useful information to users on any subject area. The finding is also supported by Reddy (1972) as cited by Welsh and Robertson (2007) who noted that cataloguer's professional knowledge is itself constantly updated by access through the internet to library of congress websites.

The study indicates that cataloguers used information and communication technology to make work done easily and faster, access to current information, professional development, increase work output, Improve my skills in the use of OPAC and improve my knowledge and skills in databases. This finding is corroborated by Ikonja-Odongo and Ocholla (2004) who noted that information sought by informal entrepreneur is to improve their business planning strategies and increase productivity. Igbeka (2003) also supported this finding by stating that the application of information and communication technology (ICT) to cataloguing process has help to improve cataloguers output and efficiency. This finding is corroborated by Talja (1992) who opined that individual benefit from information sought is not to tackle a problem that arises while performing a task but also to facilitate professional development.

Summary of the findings

- I. The study revealed that Library of congress website, google.com and IFLANET.com are the ICT tools use by cataloguers for seeking information.
- II. The study indicates that cataloguers used information and communication technology to make work done easily and faster, access to current information, professional

development, increase work output, Improve my skills in the use of OPAC and improve my knowledge and skills in databases.

- III. This study exposed that there is no significant difference between male and female cataloguers' use of information and communication technology (ICT) in their information needs and seeking behaviour in university libraries.
- IV. It was discovered in the study that there is no significant difference in the benefits derived by both male and female cataloguers from information and communication in their information needs and seeking behavior.

Conclusion

Technology has penetrated all areas of life. Electronic information sources are becoming more and more essential for the academic community in the 21st century (Kumar & Kumar, 2008). Grillon (1994) posits that the internet has changed the format of information storage and retrieval. Cataloguing and classification is not excluded from the grip of information and communication technology. Library of congress website, google.com and IFLANET.com are mostly used by cataloguers in university libraries in Edo and Delta states. Cataloguers used information and communication technology to make work easily done and faster, access to current information, professional development, increase work output, improve my skills in the use of OPAC and improve my knowledge and skills in databases.

Recommendations

The following recommendations are set forth in the light of these findings.

- i. Adequate information and communication technology (ICT) facilities should be put in place by the library managements to enable cataloguers make use of library of congress website, google.com and IFLANET.com as this will enhance the performance of cataloguers in rendering efficient and effective services.
- ii. Universities library management should put in place effective alternative power source such a standby generator to check the problem of electricity.

- iii. There is need for universities library management to train and retrain cataloguers on the use of ICT.
- iv. Cataloguers should be allowed adequate time by library management to seek for information using ICT platforms

References

- Adeyemi, B.M. (2002). Problems and challenges of automating cataloguing process at Kenneth Dike library, university of Ibadan, Nigeria. *African Journal of Library Archival and Information science*, 12 (2) 213-222
- Alzofor, S. & Van Pulis, N. (1984) "Pattern of searching and success rate in an online public access catalogue", *College and Research Libraries*, 45 (2) 110-115
- Barry, F. (1999). The new waves of change: the future. <http://www.csu.edu.au/special/specialonline991proceedings99-210htm>
- Bello, M.A. & Thompson, E.S. (2003). Recruiting the cataloguers for tomorrow: the need for succession planning in Ghanaian. *Academic libraries*, 24 (4/7), 310-315
- Bryant, P. (1997). Making the most of our libraries: Library cataloguers access the issues and opportunities. 46 (8) 554-560.
- Buttlar, L. & Garcha, R. (1998). "Cataloguing in academic libraries: their devaluing and expanding roles". *College & Research Libraries*, 59 (4) 311-321
- Fattahi, R. (1995). A comparison between the online catalogue and the card catalogue some considerations for redesigning bibliographic standards. 44 (2), 44-58.
- Grillon, J (1994). Information as a resource: an overview of the characteristics of information as a resource in the information age. <http://www.capita.wustl.edu/./infore.html>
- Igbeka, J.U. (2003). Introductory to cataloguing and classification, university of Ibadan press.
- Ikoja-Odongo, R. & Ocholla, D. (2004). Information seeking behavior of the informal sector entrepreneurs: The Uganda experience, 54, 54-66.

- Kakai, M. , Ikoja-Odongo, R.& Kigongo-Bukenya (2004). A study of the information seeking behavior of undergraduate students of Makerere University, Uganda. *World Libraries*, 14(1),
- Kumar, G.T., & Kumar, B.T. S. (2008). Use of electronic information sources by the academic community: A comparative study, 6th International CALIBER-2008, University of Allahabad, Allahabad. 684-692
- Marchionini, G. (1995). *Information Seeking in Electronic Environments*. Cambridge Series on Human-Computer Interaction. Cambridge University Press
- Nieuwenhuysen, P. (2004). Challenges in evolution of science and technological libraries adaptation and synergy for survival and success
- Oni, O., Odaro-Ekhaguebo, K., & Akpoduado, E. (2018). Assessment of information communication technology proficiency of secondary school teachers. *Journal of Pedagogical Research*, 2(1), 46-54.
- Oshiotse, J. O (2009). Information Needs and Seeking Behavior of Cataloguers in University Libraries in Edo and Delta States. (unpublished M.SC Dissertation).Department of Library and Information Science, Delta State University, Abraka
- Reddy, H. & Burton (1972). I am woman in Welsh and Robertson (2007). I am cataloguer, hear me roar. <http://www.helenreddy.com>
- Rose, M. & Fischer, K. (1995). Policies and perspective on authorship. *Science and Engineering Ethics*, 1 (4), 70-361.
- Sabinet, (1983). Cataloguing in Africa Libraries and the improvement in the standard of cataloguer
- Talja, S. (1992). Constituting information and use as research object, 67-80.
- Walson, T.D (1995). Information behavior: an interdisciplinary perspective. *Information Processing and Management*, 33 (4), 551-572