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Awareness and Use of OPAC by Distance Learners: The Case of the Open University of Tanzania

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Abstract

The survey aims to investigate the use of Online Public Access Catalogue (OPAC) among distance learners of the Open University of Tanzania. A descriptive research design has been adopted in the study. Stratified random sampling method was used to select randomly 300 distance learners. A structured questionnaire was developed and distributed randomly to 300 distance learners including undergraduate and postgraduate students. A total of 230 (76.67 percent) completed filled in questionnaires were returned back from the distance learners for analysis. Despite OPAC being the most effective information retrieval tool and of particular ideal for distance learners, findings of this study revealed low level of awareness (24.78 percent) and use (22.61 percent) of OPAC among them. The findings of this study has further revealed that majority of respondents (85.65 percent) retrieved educational resources from the library collection using browse through shelves technique. Limited number of computers with internet access, inadequate searching skills, low bandwidth and recurrent power outages were indicated as some of the barriers that militate against effective use of OPAC. The study recommends, among others, periodic information literacy training for distance learners during orientation and face to face sessions, introduction of information literacy compulsory course across the curriculum, provision of more PCs on campus, improvement of bandwidth, provision of standby generator in the computer labs and employment of proactive marketing strategies.

Introduction

Libraries play a pivotal role in the development and promotion of university education worldwide. University library being the heart of the university system, provides suitable materials useful for teaching, learning and research purposes and thus supplement classroom teaching work along with provision of knowledge required to attain intellectual pursuits. In order to achieve this goal, most libraries have put in place adequate resources to support teaching and research, trained qualified librarians capable of organizing the information contents in the most scientific and helpful order, the readers who come to use the library and its resources as well as a

library catalogue which is used to facilitate easy retrieval of educational resources in the library (Ramana, 2004; Bamidele et al., 2014).

Essentially, library catalogue is one of the important functions of the library which links users' requirements to the documents in a library. Traditionally, manual information retrieval system was used in most libraries to identify and locate available materials by checking card catalogue. Woods (1986) argues that in manual system, all cards had to be drafted, checked, typed, proof-read, corrected, sorted, filed and the filling checked. Also, whenever any book is moved to a new location, withdrawn or lost, all the cards had to be found and corrected. However, this system was characterized by various setbacks such as time consuming, subjected to perennial backlogs and errors in card production and filling (Adigun et al., 2011). Furthermore, as libraries expand and grow, it becomes more difficult to maintain the manual card catalogue due to increasing cost of catalogue maintenance.

With the rapid development of Information and Communication Technology (ICT) in the last two decades and the subsequent development of Online Public Access Catalogue (OPAC), access to library collection is provided in a more convenient and easy way. The term Online Public Access Catalogue (OPAC) refers to information retrieval system composed of database of bibliographic records describing the books and other materials owned by a library or library system. OPAC is accessible online regardless of geographical location making it convenient for remote users or via work stations usually concentrated near the library reference desk to make it easy for a user to request the assistance of a trained reference librarian .

Since its inception in late 1970s, OPAC has become widely accepted as the potential information retrieval tool and the vast number of bibliographic records has been converted into computer format, using the Machine-Readable Cataloguing (MARC) form (Feather and Sturges, 2003). Its increasing recognition worldwide is mainly because OPAC allow users to quickly and effectively search the needed bibliographical records of the materials through simple or advance searches; eliminates repetitive nature of works; improve the quality and range of services; facilitates easy and wider access to all kinds of information sources; facilitates faster information communication; increase morale and motivation of library staff; facilitates cooperation and information sharing; save time, space and resources; improve productivity and image of the

library. Moreover, with the advent of OPAC, the library information resources can be searched through multiple ways such as title, author, subjects, publisher, keyword, call number, ISBN, date and place of publication (Fati and Adetimirin, 2015).

Nevertheless, the introduction of these emerging technologies into the libraries immediately results in different skills requirements to enhance fully exploitation of them. Therefore, the success of OPAC implementation in the library depends greatly on the extent to which users are kept well informed about OPAC and be trained to equip them with requisite skills so that they can understand, accept and make more effective use of OPAC services. Therefore, optimum utilization of OPAC can be achieved by well-designed training programme, effective marketing strategy and improved accessibility to internet connected computers (Ramana, 2004; Kinengyere, 2007; Msagati, 2014).

The Open University of Tanzania Library Services: Overview

Today, Open and Distance Learning (ODL) system is increasingly important worldwide due to its flexibility, accessibility and affordability. This mode of educational delivery focuses on the pedagogy that aims to deliver education to students who are not physically onsite (Mabawonku, 2004). ODL system in Tanzania emerged as a result of failure of conventional institutions to carter for the needs of the growing number of students who aspire to enroll for higher education training. As part of initiatives to address this challenge in the country and provide cost- effective, quality education to a large sections of Tanzanians including those living in rural areas, the Government of United Republic of Tanzania established the Open University of Tanzania in 1992. Currently, the University serves through a network of regional centres spread throughout the United Republic of Tanzania and beyond. Some of the centers outside Tanzania are Egerton University (Kenya); Kibungo (Rwanda); Triumphant College (Namibia); Uganda Martyr's University (Uganda) and Malawi College of Distance Education (Malawi) (The Open University of Tanzania Prospectus, 2015/ 2016).

It is widely held view that distance learners like their counterparts in the conventional institutions need access to library services to support teaching, learning, research and community services. ACRL (2008) opines that every student, faculty member, administrator, staff member, or any

other member of an institution of higher education, is entitled to the library services and resources of that institution, regardless of where enrolled or where located in affiliation with the institution.

In order to extend library services to distance learners, the Open University of Tanzania has established a network of library services which involves main Library in the Headquarters and mini-libraries in the regional and coordinating centres. The goal is to promote the skills of reading, research inquiry and independent thinking through provision of suitable information materials to support teaching, research, learning activities among distance learners (Mabawonku, 2004; The Open University of Tanzania Prospectus 2015/ 2016).

Currently, the library houses thousands of volumes of books, theses/ dissertations, government publications, study manual, periodicals, back files of newspapers, rare books and reports. Also, the library through the Consortium of Tanzania Research and University Libraries (CORTUL) has subscribed to more than one hundred electronic journal databases. In additional to that, the library has put in place institutional repository with a view to collect, archive and disseminate intellectual outputs of the university particularly theses and dissertations. Furthermore, the library has computer labs with internet connected computers to facilitate access to electronic information resources (The Open University of Tanzania Prospectus 2015/ 2016).

Way back in the 1990s, the Open University of Tanzania library adopted manual card catalogue to facilitate easy access to the library collection among distance learners. However, with the advent of ICT in recent years coupled with the shortcomings of manual card catalogue, the library decided to adopt ABC integrated library software in the 2000s and later in the early 2010s the library switched to Koha Integrated Library Management System with its OPAC accessible online via **http://library.out.ac.tz.** The adoption of these integrated library management systems aimed at improving access to and subsequently utilization of the library collection by distance learners through facilitation of easy retrieval of library information resources in the library collections.

The adoption of OPAC in the library is of particular ideal for distance leaners as they need not to spend time to travel from their location to the library to know the availability of a particular

book, to place book requests or to spend time scanning through the library card catalogue to know the call number of a particular book. With OPAC, distance learner can now browse online the physical collection of the library anywhere regardless of their geographical location and thus this initiative has saved their time and cost of travelling from their remote locations and number of physical presence in the library. Fati and Adetimirin (2015) argues that OPAC minimizes the time and stress of searching through shelves thereby supporting the fourth of the Ranganathan's law of Library Science "Save the time of the user".

Literature Review

Since early 1980s, various studies have been carried out on the use of OPAC worldwide when there was much concern about the replacement of traditional card catalogues and book catalogues with OPAC. Despite numerous user studies carried out in the profession, studies on use of card catalogues are very few.

The historical background of OPAC dates back since 1970s when the first generation of OPAC was developed. This model emulated the card catalogue approach and was characterized by various drawbacks such as lack of authority control over name and subject heading; lack of types of materials, portion of books and information about utility and availability of books. The second generation of OPAC was developed in the 2000s with improved features such remote access, varieties of search features, display and user interface, e-mail delivery, holdings of other libraries, current awareness services, circulation information and ordering and processing files (Sridhar, 2004).

Today, most libraries worldwide have made a significant leap in terms of embracing and adopting technologies in order to increase access to and use of library collections. Nevertheless, despite of such massive investment, it is apparently that awareness and use of OPAC among library users play pivotal role on influencing the effective utilization of the library information resources to enhance teaching, learning and research among scholars. Ruzegea (2012) asserted that awareness of OPAC is the knowledge of this facility and it is also a first step to increase usage of library educational resources to aid students in their learning process. This is evidenced in the study conducted by Ebiwolate (2010) on the use of library catalogue by undergraduate

students which revealed that majority of students were not aware of library catalogue as a result they had never used the catalogue. The study further revealed that, due to limited use of OPAC majority of students resorted to browse through shelves technique to locate books which resulted to frustration and thus militated against the use of library information resources.

Similarly, the study by Bamidele et al. (2014) revealed that majority of respondents (71. 4 percent) were not aware that OPAC can be used to facilitate retrieval of library information resources and thus only (26 percent) of the respondents used OPAC independently to retrieve library information resources. Likewise, Adedibu (2008) examined catalogue use by science students and showed that the users of the OPAC represented a small portion with 33 respondents (7.9 percent).

Studies (Mulla and Chandrashekara, 2009; Arshad, 2012 and Asubiojo and Fabunmi, 2013) have identified obstacles that constrain effective use of OPAC. These factors are lack of awareness, inadequate IT skills, erratic power supply, network failure, inadequacy of computer terminals and searching library materials in oriental languages such as Urdu, Persian and so forth.

On the other hand, studies have revealed that the use of OPACs is current increasingly important worldwide and many university libraries have embraced OPACs as the potential information retrieval tool. This is revealed in the study conducted by Gohain (2013) on the use and user satisfaction on Online Public Access Catalogue (OPAC) services which reported that (72.05 percent) of respondents were aware of OPAC and that (51.03 percent) of respondents consulted the online catalogue on daily basis. Ansaar and Amita (2008) on the study of awareness and use of the online public access catalogue (OPAC) in five Delhi libraries found that a high percentage of respondents are utilising the OPAC as a search tool for retrieving documents. Also, Kumar and Vohra (2011) on the study of faculty member awareness and use of OPACs found that a significant number of users search information regarding the library material through OPAC.

Likewise, in the African context, some institutions have now taken initiatives to promote the effective use of OPAC. Yusuf (2012) on the study to investigate effective use of OPAC at the Lagos State Polytechnic Library, Ikorodu found that the majority (91.14 percent) of respondents used OPAC to retrieve materials in the library while (8.86 percent) of respondents did not use

OPAC to access library information resources. Such improvement is partly due to increased awareness campaign, adequate number of access points and proper user education programme to users on the use of catalogue for retrieval of books and other information sources.

Currently, the Open University of Tanzania library has heavily invested on the collection development to serve its users and put in place library catalogue to facilitate easy retrieval of these resources. Given the nature of distance learners being dispersed along the length and breadth of Tanzania and beyond, the university library have embraced OPAC to overcome challenges associated with the manual card catalogue. Notwithstanding, all these efforts become useless, if OPAC remain unused or failed to serve the purpose of the users. Now that, the library of the Open University of Tanzania is rich in terms of large volumes of educational resources, distance learners should make effective use of OPAC to facilitate easy retrieve of these materials so as to get value for money. Thus, in view of this, monitoring of usage of OPAC by distance learners is imperative to determine whether these efforts become fruitful.

Today, there is a breadth of literatures on the awareness and use of OPAC by distance learners in Tanzania and the Open University of Tanzania in particular. It is against this backdrop that this study was embarked upon to investigate OPAC at the Open University of Tanzania Library with a view to ascertain the level of awareness of OPAC by distance learners; the extent of usage of OPAC by distance learners and problems facing usage of OPAC by distance learners.

Methodology

The present study surveyed users of the library of the Open University of Tanzania. A descriptive survey research design was adopted for this study. This study was conducted during face to face session in May, 2016. The target population comprised of more than 6000 students. Stratified sampling method was used to select a random sample of 300 students comprised of undergraduate and postgraduate students. A total of 300 structured questionnaires were distributed randomly to 300 distance learners to elicit information on their level of awareness and use of OPAC where 230 (76.67 percent) completed filled in questionnaires were returned back

from the distance learners. Data collected through the questionnaires was organized, analysed, tabulated and interpreted by using SPSS software.

Data Analysis and Interpretation

Respondents were asked to indicate the purpose of visit to the Library. Table 1 shows frequencies of responses and respective percentages for purpose of using the library. It was found that majority of respondents 179 out of 230 respondents (77.83 percent) visited to the library for preparation of examination, followed by 155 respondents of them (67.39 percent) who mentioned that they visited to the library for general reading while 99 respondents of them (43.04 percent) indicated that they visited to the library for research purposes. It is evident from these results that a large number of respondents preferred to use the library to prepare themselves for their examination.

Table 1: Purpose of visit to the Library

Faculty	Respondents	Percentage
Research Purpose	99	77.83
General Reading	155	43.04
Preparation for examination	179	67.39

Table 2: Frequency of visit to the Library

Frequency	Respondents	Percentage
Very often	54	23.48
Often	170	73.91
Not often	6	2.61

Respondents were asked to indicate their frequency of using the library. Table 2 indicate that 170 respondents out of 230 (73.91 percent) visited to the library often, 54 respondents of them (23.48 percent) visited to the library Very often and only 6 respondents (2.61 percent) visited to the library Not often. These findings suggest that, the majority of respondents visited to the library often.

Respondents were asked to state their level of awareness of OPAC. Results in Table 3 indicate that 173 respondents out of 230 (75.22 percent) were not aware of OPAC while 57 respondents

(24.78 percent) were aware of OPAC. The findings of this study indicated that majority of respondents had low level of awareness on the OPAC facility.

Table 3: Awareness of OPAC

Awareness	Respondents	Percentage
Yes	57	24.78
No	173	75.22

Respondents were asked to indicate their level of use of OPAC. Results in Table 4 show that the majority of respondents (77.39 percent) did not use OPAC, while few respondents (22.61 percent) used OPAC to retrieve library materials.

Table 4: Use of OPAC

Use of OPAC	Respondents	Percentage
Yes	52	22.61
No	178	77.39

Respondents who indicated to use OPAC were asked to state their frequency of using the OPAC. Table 5 indicates that 9 respondents out of 52 (17.31 percent) used OPAC on daily basis, 17 respondents of them (32.69 percent) used OPAC in 2- 3 days a week and 29 respondents of them (55.77 percent) used OPAC on Occasionally basis. These findings suggest that, the majority of respondents used OPAC to search materials in the library on occasionally basis.

Table 5: Frequency of using OPAC

Frequency	**Respondents**	**Percentage**
Daily	9	17.31
2- 3 days a Week	17	32.69
Occasionally	29	55.77

Respondents who indicated to use OPAC were asked to state whether they had attended a training on the use of OPAC. Results in Table 6 show that 15 respondents out of 52 respondents (28.85 percent) attended a training on the use of OPAC while 37 respondents (71.15 percent) did not attend a training on the use of OPAC. It is evident from these findings that majority of

respondents who had made use of OPAC to retrieve library resources did not attend a training on the use of OPAC.

Table 6: Training on the use of OPAC

Training	Respondents	Percentage
Yes	15	28.85
No	37	71.15

Respondents were asked to state methods which were used to retrieve Information Resources from the Library. Table 7 reveals that 52 respondents out 230 (22.61 percent) retrieved information through OPAC, 197 respondents of them (85.65 percent) browsed information resources through shelves, 105 respondents of them (45.65 percent) retrieved information with help from colleagues and 107 respondents of them (46.52 percent) retrieved information with the assistance of the library staff. From the analysis of these findings, it is clear that majority of respondents retrieved materials in the library by using browse through shelves technique.

Table 7: Methods used by respondent to retrieve Library Information Resources

Methods	Respondents	Percentage
OPAC	52	22.61
Browse information resources through shelves	197	85.65
Help from colleague (s)	105	45.65
Assistance from library staff	107	46.52

User satisfaction regarding various methods used to retrieve library information resources shown in Table 8 reveals that out of 52 respondents who indicated to use OPAC, 41 respondents of them (78.9 percent) were somewhat satisfied while 11 respondents of them (21.1 percent) were satisfied; out of 193 respondents who browsed information resources through shelves, 175 respondent of them (90.67 percent) were somewhat satisfied while 18 respondents of them (9.33 percent) were satisfied; out of 105 respondents who retrieved information resources through assistance from library staff , 102 respondents of them (97.14 percent) were satisfied while 3 respondents of them (2.86 percent) were somewhat satisfied and out 50 respondents who retrieved information resources through assistance from colleagues, 6 respondents of them (12

percent) were satisfied while 44 respondents of them (88 percent) were Somewhat satisfied. The analysis of the findings reveal that majority of respondents (90.67 percent) were somewhat satisfied with searching information resources through shelves. Also, a good number of respondents (78.9 percent) who had used OPAC maintained that they were somewhat satisfied with the use of OPAC.

Table 8: User Satisfaction on the Methods used to retrieve library information resources

Methods	Very Satisfied	Satisfied	Somewhat Satisfied	No Response
OPAC		11 (21.1%)	41 (78.9%)	178
Search information resources on shelves		18 (9.33)	175 (90.67%)	33
Help from library staff		102 (97.14%)	3 (2.86%)	125
Assistance from colleagues		6 (12%)	44 (88%)	180

Respondents were asked to state challenges in using OPAC. Findings in Table 9 reveal that 173 respondents out of 230 respondents (75.22 percent) were not aware of OPAC, 157 respondents of them (68.26 percent) mentioned low bandwidth, 163 respondents of them (70.87 percent) mentioned limited access to computers, 170 respondents of them (73.91 percent) mentioned inadequate searching skills and 59 respondents of them (25.65 percent) mentioned recurrent power outages. From these findings, it is clear that lack of awareness of OPAC is the major challenge facing use of OPAC by distance learners.

Table 9: Challenges in using OPAC

Challenges	Respondents	Percentage
Low bandwidth	157	68.26
Limited access to computers	163	70.87
Inadequate searching skills	170	73.91
Recurrent power outages	59	25.65

Discussion and Conclusion

The need for having an effective information retrieval mechanism in the library settings is of paramount to influence maximum use of library information resources amidst this age of information explosion. OPAC being the most efficient information retrieval system plays critical role in facilitating easy retrieval of library information resources in the library. The present study attempted to examine the level of awareness and use of OPAC among distance learners of the Open University of Tanzania. Findings of this study reveals that most of respondents (75.22 percent) were not aware of OPAC and thus only few respondents of them (22.61 percent) used OPAC to retrieve library materials.

These findings conform to the previous study by Bamidele et al. (2014) who found that that majority of the respondents (71.4 percent) were not aware of OPAC. It is evident from these findings that lack of awareness of OPAC has a negative impact on the use of this resource and eventually leads to underutilization of library information resources. The findings of this study is consistent with the view of Asemi and Riyahiniya (2007) who opined that when a user is made aware of the resource, it will usually lead to the effective use of that resource. Similarly, the findings of the present study agree with previous study by Fati and Adetimirin (2015) who found a significant relationship between awareness and utilization of OPAC. Nevertheless, the findings of this study is contrary to the previous findings by Ruzegea (2012) who found that all students (100 percent) were aware of the OPAC and its interface features.

The present study also reveals that, respondents used various techniques to retrieve information resources in the library. The findings from Table 7 reveals that the most commonly method used to retrieve books in the library was search information resources through shelves while the least used method was OPAC. However, despite browse through shelves being the most commonly method used to locate books in the library, the findings from Table 8 reveal that majority of respondents (90.67 percent) were somewhat satisfied with this method. This is probably due to the fact that as the size of the library collection becomes large, it may become cumbersome for users to locate books through shelves and consequently militate against the effective use of library information resources. The main reason for its extensive use among distance learners is because browse through shelves method is probably the major option available at their disposal. This finding confirms the findings of Ebiwolate (2010) who revealed that majority of

respondents were not aware of OPAC with the result that majority of students did not use the resource to retrieve materials in the library. The study further revealed that majority of respondents resorted to browse through shelves method to locate information resources in the library.

Likewise, this finding agrees with the previous study by Adedibu (2008) on the study of catalogue use by science students which reveals that only few respondents (7.9 percent) have used OPAC to retrieve library information resources. Contrary to these findings, Yusuf (2012) study on the effective use of OPAC to retrieve library education resources revealed that (91.14 percent) of respondents used OPAC to retrieve materials in the library while (8.86 percent) of respondents did not use OPAC to browse the library collection.

Apart from awareness of OPAC, other factors such as training on the use of OPAC also plays crucial role in influencing effective use of this facility. The findings from Table 8 reveals that majority of respondents (78.9 percent) who used OPAC to retrieve library materials were somewhat satisfied with OPAC, while (21.1 percent) of them were satisfied with OPAC. This might be attributed to the fact that a good number of respondents (71.15 percent) from Table 6 did not attend a training on the use of OPAC and so the majority of respondents lack requisite searching skills.

These results support the findings of Islam (2010) which revealed that majority of respondents prefer to browse books through shelves because there is no proper user education programme in the university to make proper use of library catalogue. The author suggested on users education programme to facilitate the use of catalogue.

These findings also substantiate the findings of Thanuskodi (2012) who found that typical users of OPAC do not have the range of knowledge and skills needed for effective subject search. Thus, user community need to be oriented and trained on the use of OPAC in order to ensure optimum use of the resource. Such efforts would help to pass on information literacy skills to library users to enable them to make effective use of OPAC.

The study further identified other factors that constrain the effective use of OPAC. These factors were low bandwidth, limited access to computer and recurrent power outages. These findings corroborates to previous findings by (Mulla and Chandrashekara, 2009; Fabunmi and Asubiojo, 2013).

Therefore, it is clear that despite of efforts being taken by the library to deploy OPAC to facilitate access and use of library information resources, majority of distance learners have not made effective use the facility to retrieve information resources in the library.

Rehman and Ramzy (2004) lamented as follows:

"While libraries purchase and install the latest, most technologically advanced computerized information systems and procure expensive resources, these may not be optimally used due to lack of awareness or the lack of ability to use these resources among the user"

Fati and Adetimirin (2015) echoed the same sentiments by stating that setting up OPAC without target users being sensitized about its availability, functions and benefits can be considered as a waste of resources. Kinengyere (2007) argues that underutilization of library electronic resources and OPAC in particular in the library is mainly attributed to either lack of awareness of that resource, users do not know how to use them or they do not know what resources are being offered.

Conclusion

The present study aimed at examining the level of awareness and use of OPAC by distance learners at the Open University of Tanzania. The findings revealed that the use of OPAC by distance learners was very low. The main reasons for this state of affairs was due to low awareness of OPAC, inadequate searching skills, recurrent power outages, limited access to computers and low bandwidth.

Also, the analysis of the findings reveals that, while browse through shelves was the commonly used method by respondents to retrieve library information resources, most respondents were somewhat satisfied with this method. These findings suggest that, browse through shelves

method was the highly used information retrieval method amongst distance learners probably because it was the major retrieval technique available at their disposal.

Basing on the findings of this study, the library should help its users to adopt and assimilate OPAC since its effective use has a significant impact on the teaching, learning and research activities. In order to influence fully exploitation of the OPAC services amongst distance learners, the University Library should organize periodic information literacy training for distance learners during orientation and face to face sessions. Such outreach programme are needed to promote OPAC and teach different searching techniques and strategies including formulation of simple and complex Boolean search strategies to help distance learners optimize their searches. This should go along with conducting regular training to library staff so that they could offer assistance to students who are facing difficulties in using OPAC. In addition to that, the Library should introduce information literacy course in the University which should be a compulsory credit earning for all distance learners. Such course would equip students with basic searching skills and enhance them with proficiency in the library use and OPAC in particular.

Also, the Library should formulate marketing strategy to create awareness on the OPAC services among distance learners. This can be done by providing user guides which outlines basic operations of OPAC nearby computer terminals in the library computer labs; displaying user guide on the library notice board, library website, calendars; publishing and distributing brochures, newsletters; mailing list programme; placing posters in strategic places; conducting library awareness programme such as library week and participating in academic fairs such as Tanzania Commission for Universities (TCU) exhibition.

Furthermore, the University should improve ICT infrastructure in the main library at the Headquarters and mini-libraries in the regional centres to widen accessibility of OPAC to distance learners. Efforts should be made to increase number of OPAC terminals, improve internet bandwidth and provide standby generator.

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