A Survey of ICT Search Strategy Skills among Academic Staff in Modibbo Adama University of Technology Yola, Adamawa State, Nigeria

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Abstract:- The objectivity of the role of ICT as a means of providing millions of information sources cannot be disputed. This availability has at a point brought about information overload such that one has to take enough time and skill to be able to access the right information to make a meaningful decision. This study is an attempt to assess the ICT search strategies by the Academic staff of the Modibbo Adama University of Technology Yola. Four objectives were raised and in line with that, four research questions were answered. The study used survey research design while two hundred and thirty-nine (239) questionnaires were administered on the academic staff drawn from the nine (9) faculties or schools using a stratified random sampling technique. Data collected was analyzed using descriptive statistics of frequency counts and percentages displayed in charts. The findings of the study reveal that: There was "Low" extent of awareness of internet search strategy skills; Field searching and phrases searching are the most used ICT search strategies; There was low extent of satisfaction with the use of the search strategies in retrieving information, and Lack of knowledge on the search strategies, inadequate ICT literacy, and poor network constitutes the bulk of the problems faced by Academic staff of Modibbo Adama University of Technology Yola. Amongst other recommendations proffered includes: there should be an organized training for academic staff on how to effectively ICT to surf information, Librarians should assist academicians in searching for a piece of information, etc.

Keywords:- ICT, search strategies, academic staff, university.

I. INTRODUCTION

The emergence of electronic technology has tremendously transformed publishing industries thereby creating information overload to both library staff and the community of users. It has equally alleviated the difficulties faced in managing library holdings since the ICT driven technology is being used today to perform all library operations. The difficulties incurred in getting access to the holdings of other libraries near and far away have been made cheap, easy and timely without considering the distance. Prominent among the influence of ICT in information management toward ensuring the availability of information resources at any time of the day include; hyperlinks to other resources; huge information reservoirs;

quick information; various search options; easy citations; ease in uploading and updating; ease in storage and dissemination; flexibility; time, space, and cost-effectiveness (Tekale and Dalve,2012).

ICT driven information sources are priceless research tools that complement the print-based resources in a traditional library setting. Okiki (2011) stressed that information is the pivot on which the survival of any society rests. According to him, information remains the major ingredient in making a decision and also assists in reducing the degree of uncertainty. But the inability to sieve from among the numerous one leads to misguidance especially when the need for a practical and immediate solution to an immediate problem arises. The need to have absolute control over the information boom or overload is a battle that must be worn only if the implementation of the verdict using the information retrieved would be meaningful.

Information is said to be overloaded when there is a high rate of influx of information leaving the accessory with just a limited processing capability for a meaningful interpretation and application. Humans have poor abilities in processing unrefined or raw information and they can be quickly overwhelmed in comparison with computers. Although we acknowledge d the fact that the surrounding environment is fully saturated with piles or millions of information, the same society or environment still expect particularly, the academicians to come out with quick and well-refined results that could be used to effect a change. No wonder that what makes the difference between the informed and the uninformed, the rich and the poor and, the educated and the uneducated is the ability to have access to the right information at the right time on the right need at hand.

The excessive amount of information according to Mähler, (2016) happens in a situation where a person is given further information from which to choose than the required amount to carry out his or her duty. He further argued that ICT is said to be widely accepted avenue by which excess information can be witnessed. Going by the general rationale behind applying ICT in handling information emanated from the need to ease communication, among like minds to enhance professional knowledge sharing. It has become difficult for researchers and academicians to just rely on one online publication due to the high infiltration and abuse of technology by posting all sorts of a nuisance. This calls for a better search strategy or

search modifier that will direct the enquirer's query to the right information sources. Identifying the search strategies and applying them accordingly makes a great difference among researchers and academicians in presenting their papers or lectures on a particular issue that requires accurate information for decision making or solving the problem.

According to the University of Johannesburg Library [JUL] (2020), "search strategies are ways to use research terms to find the necessary search tools, like library catalog and online database information. Search techniques are not limited to search terms. Search methodology must be used to achieve positive search results". They further stated the following as the most common among search strategies used by internet users: Boolean logic, Truncation; Field searching; Phrase searching; Parentheses, and Wildcards.

People that are cumbered with piles of information will be confused and will always find it difficult to promptly make a decision... although information seekers may be determined to use ICT driven access point to surf for a piece of information. If the search does not yield results, they get discouraged and lose hope and finally, they surrender and terminate the search. Understanding how and where to efficiently access information as well as understanding what became of the knowledge is a fundamental skill to develop throughout the internet age complexity and technological developments. The use of right matching techniques does not only allows the millions of seekers to have access to the best knowledge but also saves their resources and time. Understanding the search strategies among the academic staff of the Modibbo Adama University of Technology, Yola to ensure prompt and accurate knowledge to students is the basis for this study.

II. STATEMENT OF THE PROBLEM

As the world is globally shifting toward ICT is all its activities, university libraries in Nigeria are spending millions of naira toward becoming ICT compliance. This is aimed at having access to abundant sources of information with the view to ensuring that academicians are not left behind in their research and development activities. But having abundant information has brought about mixed feelings in that it is becoming a problem to lay hands on the right information as at when due that has resulted into a decline in the strength of the research finding> This, has created another challenge that researcher spends more time to find the right information for better output.

According to Viegas et al., (2015)., the issue of spending unnecessary time to take decisions, brings about psychological challenges which also leads to series of misunderstandings among staff or researchers that is also at the detriment of the job performed itself. This study is an attempt to ascertain whether the academic staff at the Modibbo Adama University of Technology Yola are conversant with ICT search strategies for accessing internet resources for their academic activities.

III. OBJECTIVES OF THE STUDY

The general objective of the study is to determine the extent of ICT search strategies possessed by academic staff at the Modibbo Adama University of Technology Yola in accessing their information needs while the specific objectives are to:
- Ascertain the extent of E-resources search strategy skills possessed by Academic Staff of Modibbo Adama University of Technology, Yola.
- Ascertain the most used search strategy skill by Academic Staff of Modibbo Adama University of Technology, Yola.
- Ascertain the level of satisfaction in using search strategy skills by Academic Staff of the Modibbo Adama University of Technology Yola.
- Determine problems associated with the use of internet facilities by Academic Staff of Modibbo Adama University of Technology, Yola.

IV. RESEARCH QUESTIONS

1) What is the extent of e-resources search strategy skills possessed by the Academic Staff of Modibbo Adama University of Technology, Yola?
2) What is the most used search strategy skill by the Academic Staff of the Modibbo Adama University of Technology Yola?
3) To what extent are Academic Staff of the Modibbo Adama University of Technology, Yola satisfied in using search strategy skills doe information retrieval?
4) What are the problems associated with the effective use of internet facilities by the Academic Staff of Modibbo Adama University of Technology, Yola?

V. LITERATURE REVIEW

The primary objective for introducing searching strategies for internet users is to overcome the challenges of information load in selecting the right information as at when due for positive development Experts and researchers are less bothered by unnecessary or improper content and excessive electronic hiking with a holistic approach that provides a link between the information and the seeker.

Generally, researchers that have the required training or orientation no longer have the difficulties of engaging in a search. It is therefore certain that the question is not just the Internet search strategies, but the attitude toward Web usage is unwelcoming. When there is a lack of awareness, it could lead to ignorance which most of the time leads to poor decisions or reactions to certain actions. The issue of awareness and the understanding of the existence and the effectiveness of internet search strategies is itself, a development in the global sources of online information storage, retrieval, and dissemination. To concur with this view, Lee quoted in Ejizu (2010) pointed out that, the internet offers a secure, successful and the most enhanced and reliable information by any user whose aim is to achieve a particular task. But surprisingly, the bulk of the academic institutions are still grappling with unsatisfied information

needs due to poor search strategies in using IT-based resources.

In another development, Laxman (2010) discovered in his research that numerous rates of search strategies may be needed for effective use to solve the unstructured resolution on the sites. Several experiments have been carried out on the function of research meanings in the search strategies of learners specifically to widen their research output. In the words of Tekinarslan (2008) as cited in Tsai, Liang, Hou, and Tsai (2012)pointed out that, the difficulties encountered with search terms definition, evaluation of search results, judgment of source, information, and search control were attributed to the low level of awareness on the various categories of search strategies among information seekers.

ICT based information resources are indeed a wonderful source of information to researchers and academicians. But if a search is made without being fruitful, there is the tendency of bypassing the technique or the strategy for the old tedious method. While researching health information online, Hargittai (2012) reported that owing to the inadequate search strategies required to access material on the site with medical implications for educated and effective online usage, they keep on changing search strategies.

The use of internet-based resources has been tried by several enquirers but because of the unsatisfactory nature of the retrieved information, people avoid using it. It was found that many information seekers cannot resist the challenges faced in accessing the information on the internet considering the disappointments in getting multiple answers and sources that are most of the time not satisfactorily provided. Nneka, Obiora, and Juliet cited Mutala in their article. (2014) indicated that after recovered from failed search efforts, researchers still go back to the existing former approach of interacting with a computer with the search outcomes that have inefficient search seeking strategies such as moving subjects to other web sites, learning new terms, and constantly receiving guidance

The determining factor for any repetitive activity is attributed to the inadequate conviction in the errand or venture. But where there is difficulty in concluding, it becomes impossible or rare to repeat the venture this is in line with the findings of Du and Evans (2011) while trying to carry out analysis on the way 11 doctoral students check for information regarding their true study assignments. The search strategies were uncovered as a consequence of the analysis, which indicated that they use numerous strategies used by enquirer such as rephrasing the search, word search, etc owing to multiple answers that are always difficult to make a decision

Also, learners in universities as revealed by Tsai, Liang, Hou, and Tsai (2012) have considerably better attitudes and abstract comparisons on their own than the ones used in Internet research for information purposes. By looking at approaches in these fields, the variations have been established as a consequence of tracking, loss of balance and assessment on the retrieved information online

due to lack of satisfaction by researchers and academicians. That is to suggest, as information seekers. They are not yet convinced that the internet can accurately and time serve their information needs as in the case of using the conventional information resources.

The strategies used by academicians and any other information seekers vary significantly due to their level of satisfaction with the search strategies and their reliabilities. Frat, et al (2010) while trying to find out how information seekers to access information on the internet found that instructors' use of online search techniques varies from initiation to growth. They also found that, they had no connection to their issues when looking for the World Wide Web for research; that they had inadequate information while visiting websites leading to the infection risks when searching. They in their final remark suggested that in-service instruction be begun on how to view and download internet-based information.

The quest for information among academic staff is a continuous struggle that has to be worn. This has prompted lecturers into acquiring ICT literacy and be able to manipulate it effectively for information retrieval. But owing to the lackadaisical attitude of the government, particularly Nigeria toward adequate electricity supply according to Nneka, Obiora, and Juliet. (2014) is not a good story to tell. The cost of running a generating power plant is not easy considering the economic meltdown of the country.

Weak network facilities are at risk and some governments, especially in Nigeria have already privatized and may not want to grant links to powerful links that enhance fast telecommunication for a constant and strong network like VAST For effective and efficient exploitation of internet-based information resources according to Nneka, Obiora, and Juliet. (2014) the university community will have to learn the modern search strategies and be able to satisfy the quest for information from the internet. They further argued that only a fraction of academicians and scientists in underdeveloped countries may have the time and comfort to develop internet search strategies that guarantee information retrieval. It is therefore obvious as noted by Pijpers (2010) that the innovation continuous advances are rapidly putting more stress on flesh and brain which can be relatively upgraded due to the general nature of unchangeable of man. To this end, it is clear that we did not have enough technical skills to handle knowledge, which led readers to feel annoyed, overwhelmed by the senses of resentment, weakness, impatience, and hopelessness.

VI. METHODOLOGY

For this research, the survey research design was employed. A total of two hundred and thirty-nine (239) academic staff drawn from nine (9) faculties or schools in the university using stratified random sampling was used as the population of the study. The main instrument used for data collection was the questionnaire. Data collected was analyzed using descriptive statistics of frequency counts and percentages displayed in charts.

VII. RESULT AND DISCUSSION

The study found that the bulk of the academic staff in the studied institution senior lecturers pulling 71(36.6%), lecturer one 44(22.7%), lecturer two 37(19/1%), associate professor 20(10.3%), professors 16(8.2%), assistant lecturer 6(3.1%), and finally, graduate assistant 2(1%) respectively. it was also found the majority of the respondents are males with 163(83.2% as against females having 33(16.8%) respectively.

A. *Research Question One:* What is the extent of internet search strategy skills possessed by Academic Staff of Modibbo Adama University of Technology, Yola?
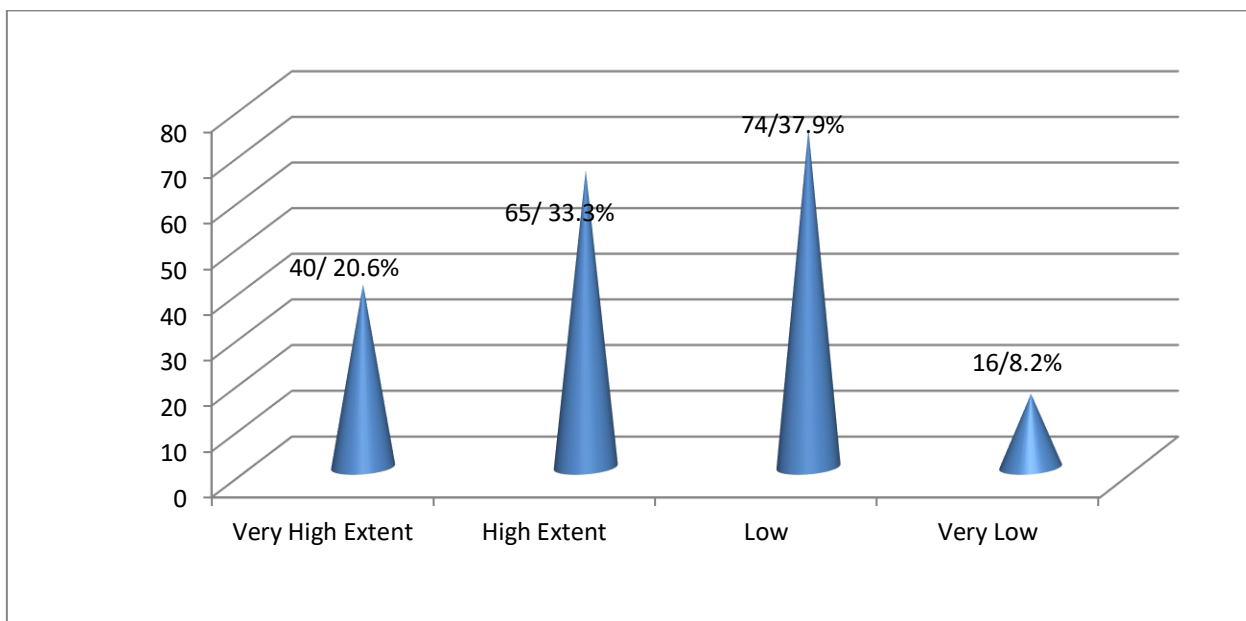

Fig. 1: Extent of awareness of ICT search strategies by academic staff of Modibbo Adama University of Technology Yola

The table above reveals the true representation of Academic staff of the Modibbo Adama University of Technology Yola on their extent of awareness of internet search strategies. There was a low understanding of the awareness of search strategies as represented by 74(37.9%), followed by High Extent from 65(33.9%), Very high Extent with 40(20.6%), and the least from Very Low representing 16(8.2%).

B. *Research Question2:* What is the most used search strategy skill by the Academic Staff of the Modibbo Adama University of Technology Yola?
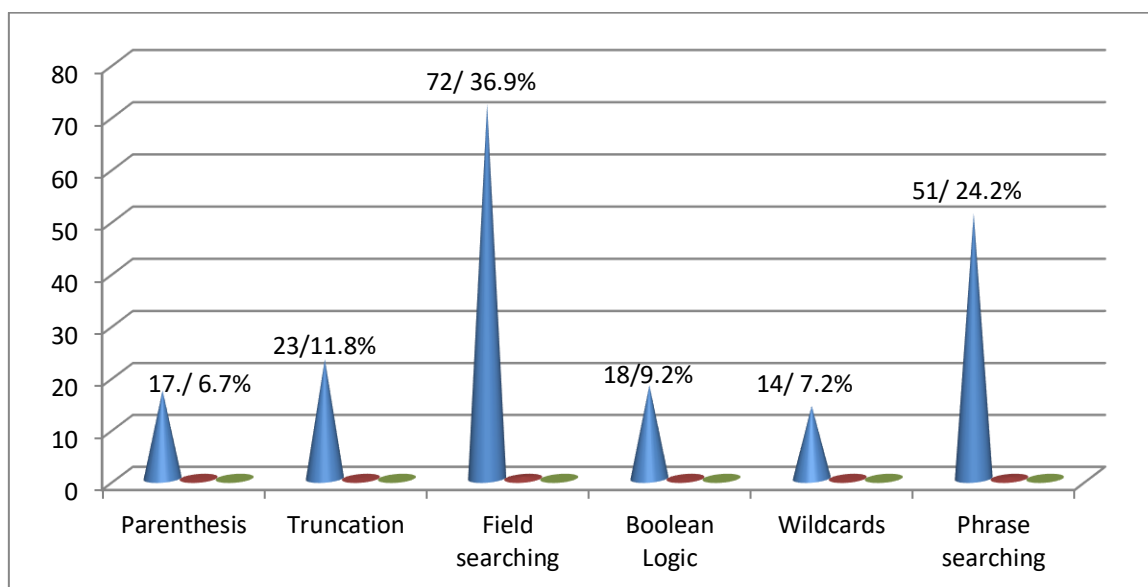

Fig. 2: Search strategies used by the academic staff of Modibbo Adama University of Technology Yola.

Based on the table above, it can be seen that the Academic staff of the Modibbo Adama University of Technology Yola have little knowledge of the use of search strategies in surfing for information on the internet. The use of Field searching was most used as indicated by 72(36.9%), followed by phrase searching with a frequency of 51(24.2%) while the remaining search strategies were used by just a few of the lecturers.

C. Research Question 3: To what extent are Academic Staff of Modibbo Adama University of Technology, Yola satisfied in using search strategy skills doe information retrieval?
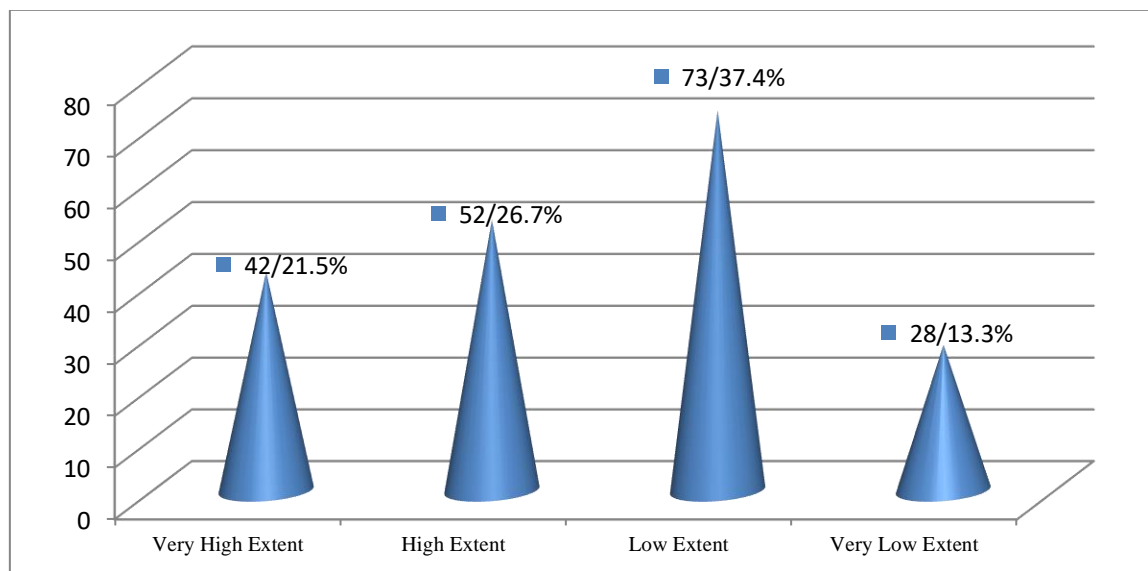

Fig. 3: Extent of satisfaction derived in surfing information retrieve using search strategies by Academic staff of Modibbo Adama University of Technology Yola.

The above table reveals that the extent to which Academic staff of Modibbo Adama University of Technology Yola was low as indicated by 73(37.4%), followed by high Extent recording 52(26.7%), while Very high Extent and Very low Extent had 42(21.5%) and 28(13.3%) respectively.

D. Research Question 4: What are the problems associated with the effective use of internet facilities by Academic Staff of Modibbo dama University of Technology, Yola?.
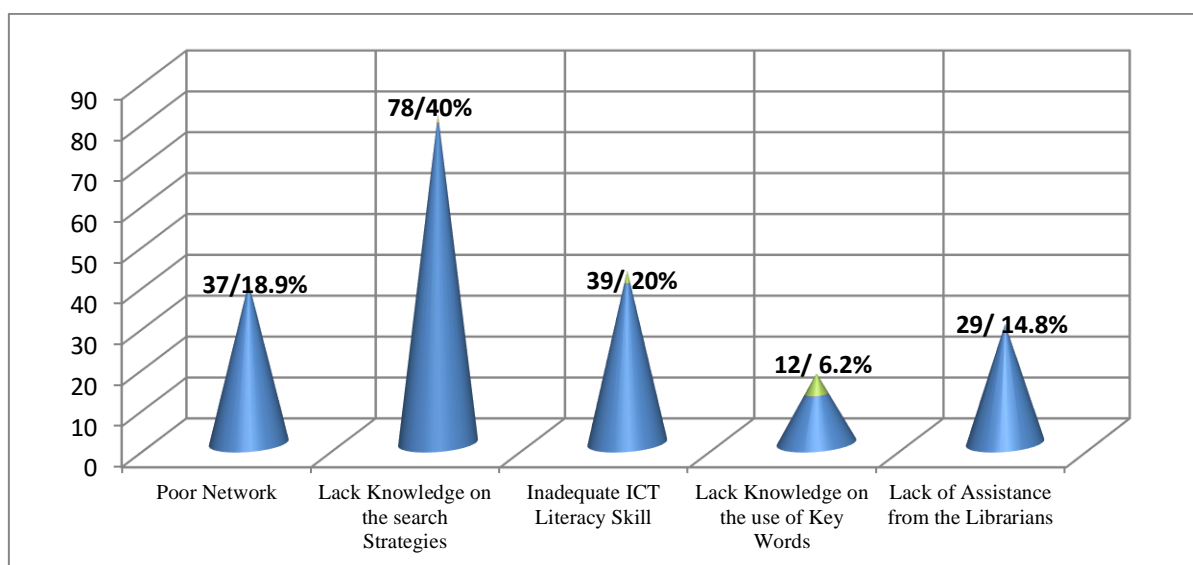

Fig. 4: Problems associated with the use of internet facilities by Academic staff of Modibbo Adama University of Technology Yola.

Based on the table above, Lack of Knowledge on the Search Strategies attracted the highest score of 78(40%), followed by a Lack of ICT literacy among the academic staff pulled 39(20%) and poor Network had a score of 39(18.9%). The least among the problems as revealed by the respondents include Lack of knowledge on the use of Keywords and Lack of Assistance by the Librarians with 12(6.2$) and 29(14.8%) respectively.

VIII. SUMMARY OF MAJOR FINDINGS

Based on the data analysis, the major findings of the study reveals that:

- There was "Low" extent of awareness of internet search strategy skills possessed by Academic Staff of Modibbo Adama University of Technology,
- Field searching and phrases searching are the most used ICT search strategies by Academic staff of Modibbo Adama University of Technology Yola
- There was a low extent of satisfaction with the use of the search strategies in retrieving information by the Academic staff of the Modibbo Adama University of Technology Yola.
- Lack of knowledge on the search strategies, inadequate ICT literacy, and poor network constitutes the bulk of the problems faced by Academic staff of Modibbo Adama University of Technology Yola.

IX. CONCLUSION AND RECOMMENDATIONS

The resurgence of ICT driven information resources and sources has tremendously brought about a change in the information management system such that even the underdeveloped countries like Nigeria is benefiting. That with a click of a button with the right search strategy, one can access the right information promptly where the difficulties in the distance, cost, and time are no more effective or anything to consider again. Academic environments like Modibbo Adama University Lecturers have the same opportunity to benefit from such gesture. Based on the finding of the study, it was realized that more has to be done to be able to fully access the right information that can be used to make effective decisions. Lack of awareness on the various search strategies and using them appropriately for effective results to avoid information overload or multiple answers have not been sound, and problems emanating from electricity supply, poor telecommunication network, and inadequate ICT literacy are found to be some of the challenges that need to be addressed if effective use of internet must be guaranteed.

X. RECOMMENDATIONS

It is true that once a problem is identified, it is believed that it is half solved. This is to draw the attention of both the university management and the lecturers themselves to the following recommendations for effective implementation of ICT for information management: the need for adequate ICT training the user community of the university to expose them to the various internet search strategies; enhancement of the electricity supply and networking facilities be considered a battle that must be worn sound and perfect use of internet for information provision.

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