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RESEARCH ARTICLE

LIBRARY MANAGEMENT AND THE ADOPTION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN UNIVERSITY LIBRARIES IN AKWA IBOM AND CROSS RIVER STATE, NIGERIA

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ABSTRACT

The study was conducted to investigate the relationship between Library management and the adoption of Information and Communication Technology (ICT) in University Libraries in Akwa-Ibom and Cross River States, Nigeria. To achieve this, two hypotheses were formulated to guide the study. Survey research design was adopted for the study using a total of one hundred and fifty (150) respondents, through purposive sampling technique. A validated questionnaire with a reliability estimate of 0.86 was used for data collection. Data collected were analyzed through the use of Pearson Product Moment Correlation Analysis technique. The testing was carried out at .05 level of significance. Results of the analysis among other things revealed that, planning of library services and staffing have statistically significant relationship with the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria. Based on the findings of the study, it was recommended that: proper planning should be a continuous process in order to improve ICT competences among institutional administrators. It was equally suggested that library staffs and education planners should be properly trained in the use of ICT in library operations in order to enhance the advantages derivable from library services.

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INTRODUCTION

Management as a process, involves the methods or techniques by which activities are co-ordinated to achieve results. According to Haider (2007), the four named basic ingredients in the management process are, decision on course of action, obtaining the necessary physical resources, enlisting others to assist in the performance of requisite tasks, seeing that the job is properly accomplished. Inyang (2004) noted that it is the pervasiveness of this human element that gives management its special character as a social process. The managers are the activating elements who convert various disorganized resources and productive forces such as men, money, materials, machines and methods into useful enterprises, this integration is the cornerstone of managerial functions. Omirin and Olayinka (2007) considered the task of managing an organization to include, determination of the mission of the system, security of inputs, that is, organizational resources, transferring the input into product which is services, legitimization of organizational activities. Thus, the manager who practises management moves the organization towards the attainment of its goal and purposes by assigning activities that organizational members perform. Management of Library as an organization is different from what obtains in other

organizations. Library Management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. Library management encompasses normal management tasks and the basic tasks in library management includes planning the acquisition of materials, negotiating borrowing materials from other libraries, selection of library materials, among others. However, the not-for-profit nature of academic and most libraries cannot prevent the management team from achieving the desired goals. Adeyoyin (2011) opined that the Library is one of the most important academic support services in any institution of learning and other relevant organizations.

As a support system it has to be service-oriented, but results cannot be achieved in a vacuum, it has to be emphasized that the library's objectives are tailored to meet the goals of the parent body. However, no effective management can be operated or library service rendered if both primary and secondary objectives are not clearly formulated and well understood by both the library staff and library users. In the library, the librarian together with management staff plans together on how to achieve the set goals and objectives of the parent university through the achievement of its specific objectives, since University library is a library that is attached to a higher education or institution which serves two complementary purpose to support the school's curriculum, and to support the research of the University, Faculty and

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Students. Ifidon and Ifidon (2007) outlined the major objectives of university libraries as: Provision of materials to help library users in their personal self-development; Provision of information resources for research and advanced study by lecturers; students and even government; Provision of materials in support of the learning process; Cooperation with other libraries to broaden access to materials with a view to developing a network of University library resources, which are at the disposal by staff and students; Meeting the specialized information needs of the University Community.

In the Library set-up, ICT, according to Ayodele (2002), is electronic based technology generally used to retrieve, store, process and package information as well as provide access to knowledge. Aluko (2004) also described ICT as enabling technologies (both hardware and software) necessary for delivery of voice/audio, data (high speed and low speed) video, fax and internet services from point A to B or multiply BCDE using wired and wireless media protocol, such as internet protocol (IP) networks. ICT according to Ascroft and Watts (2005) has brought about considerable improvement in information provision and dissemination. It has become cheaper to digitally store, process and access large amount of information at greater speed. According to them, ICT has controlled the information explosion 'bomb' to such an extent that it is now possible to obtain information from any library anywhere in the world regardless of the geographical positions of the user and the library. The introduction of various ICT trends has led to reorganization, change in work patterns, demand for new skills, job retraining and reclassification positions. Technological innovations of the past twenty five years, such as the electronic database, online services, CD-ROMs and internet have radically transformed access to information. ICT holds the key to the success of modernizing information services. Applications of ICT are numerous but mainly it is used in converting the existing paper-print records in the entire process of storage, retrieval and dissemination. The electronic revolution is impacting seriously on the traditional role of the University library as an institution that collects, stores information, and makes it available to its user. In this age of internet, the electronic information sources are very accessible, reliable and highly cost – effective, and that this is having an edge over print sources. It is important to note however, that ICT cannot on its own intervene and effectively influence library services. Its intervention, adoption, and sustenance must be properly planned by the librarians. The value of strategic planning has been articulated by Ajayi (2002) as an important means of overcoming the challenges facing Universities and their libraries. This study therefore is being conducted to evaluate the relationship between library management and the adoption of ICT in University libraries in Akwa-Ibom and Cross River State, Nigeria.

Statement of the problem

The issue of Information and Communication Technology ICT adoption in university libraries has generated much discussion in recent time. This has been evident in seminars, conferences and workshops but yet not much appears to have been achieved in this direction. It is the view of the researcher that, full potentials of the benefits derivable from the adoption of ICT in

University libraries have not been fully realized in most of the higher institutions in Nigeria. Especially when it is noted that access to journals and other materials are most of the times, not possible, either because of lack of power supply or that the network has broken down. It is an aberration to talk about the adoption of ICT in an environment where people are not getting satisfactory services? Akintunde (2007) equally observed that libraries which have claimed to be automated, find it difficult to use these automated facilities (ICT) because of lack of basic support services such as computer network, as well as important components such as internet and intranet, adequate provision of funds, and high cost of maintaining ICT facilities. Lack of electricity appear to be a general phenomenon among university libraries in Akwa-Ibom and Cross River States, Nigeria. Based on these myriads of problems, Akintunde (2007) concluded that the future trend of the use or ICT in Nigeria Universities libraries is difficult to predict. In Nigeria, however, very few studies regarding management related issues and the adoption of ICT in University libraries are available, even though much has been said about the need for ICT. Certainly, ICT on its own cannot perform the wonders without human beings taking responsibility and interest on how the adoption of these facilities can be properly planned, integrated, serviced and sustained. Therefore the need does arise to confirm whether there are problems relating to Library management and the adoption of ICT in University libraries in Akwa – Ibom and Cross River States, Nigeria.

MATERIALS AND METHODS

Survey research design was used to carry out the study. This approach was utilized in order to have a clear picture of the type of interrelationship between the selected management variables (planning and staffing) and the adoption of ICT in the selected Universities. The population of the study is made up of all librarians serving in the University libraries in Cross River and Akwa Ibom States. The total population of librarians in these institutions based on preliminary investigation was put at 162. Purposive sampling technique was used to select the entire 162 Librarians available in all the university libraries under study. A validated structured questionnaire titled University Library Management Variables and the adoption of ICT Questionnaire (ULMAICT) was used to collect information from the subjects of the study. Two research assistants were recruited and trained to make data collection process much more efficient. The librarians were met individually in their offices during the office hours: A period of three days was allowed each of the librarians to attend to the questionnaire before going back to retrieve the questionnaire from them. However, only one hundred and fifty (92.6%) of the copies of questionnaire retrieved were found treatable and used for the study. Therefore, analysis of data in this study was based on the submission made by the One hundred and fifty out of the entire population of one hundred and sixty two librarians from the selected University Libraries.

The Two research hypotheses formulated for the study are:

- (i) There is no significant relationship between planning of library services and the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria.

- (ii) Staffing does not significantly relate with the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria.

RESULTS AND DISCUSSION

The result of the analysis is presented in Table 1. Above, the result reveals that the calculated r – value of 0.65 is higher than the critical r -value of .159 at .05 level of significance with $N=148$ degrees of freedom. With this result the null hypothesis was rejected. This result therefore means that Planning of library services has a significant relationship with the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria. The result in Table 2 reveals that the calculated r – value of 0.58 is higher than the critical r -value of .159 at .05 level of significance with $N=148$ degrees of freedom. With this result the null hypothesis was rejected. This result therefore means that Staffing has a significant relationship with the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria.

the library's mission. It is worthy to note that planning is the bedrock upon which management is certain to achieve the set down objectives of the organization. This means that rational decisions must be taken to introduce change through the adoption of new technologies. It may be deduced from the above that without adequate planning which enhances results, objectives of a library cannot be achieved. The management element of planning is so indispensable that nothing tangible can be achieved without it especially in terms of the adoption of Information and Communication Technology. The findings of this work is in consonance with the work of Haider (2007) who reported that barrier to the effective implementation and adoption of Information Technology in Pakistan library is lack of systematic planning and he stresses that special attention needs to be paid to formulation of policies and emphasis on comprehensive planning to automate the library operations. There is no library that can succeed in this new era of technology without planning. It is also obvious from the finding that the librarians in university can discharge their duties efficiently to the users, if proper planning of their

Table 1. Analysis of the relationship between Planning of library services and the adoption of ICT

Variables	\bar{x}	SD	ΣX ΣY	ΣX^2 ΣY^2	ΣXY	R
Planning of library services (x)	18.06	1.17	2709	6254		
The adoption of Information and Communication Technology (ICT)(v)	22.13	2.19	3320	7461	94411	0.65*

*Significant at .05 level, critical $r = .159$, $df=148$

Table 2. Analysis of the relationship between Staffing and the adoption of ICT

Variables	\bar{x}	SD	ΣX ΣY	ΣX^2 ΣY^2	ΣXY	r
Staffing(x)	18.80	1.19	2820	6465		
The adoption of Information and Communication Technology (ICT) (v)	22.13	2.19	3320	7461	94562	0.58*

*Significant at .05 level, critical $r = .159$, $df=148$

Planning of library services and the adoption of information and communication technology

The result of this study shows that planning of library services has statistically significant relationship with the adoption of Information and Communication Technology (ICT) in University libraries in South-South Nigeria. The finding is in line with the view of Atimo (2000) who reported that planning provides direction, reduces the overall impact of change, increases productivity and allows librarian to organize, lead, control and direct activities necessary to accomplish organizational objectives. The most significant reason for planning observed by librarians who plan library services better than non-planners in goal attainment. This means that planning process is absolutely necessary if library is to respond effectively to the information needs of its users. In addition, the finding shows that the objectives of the university library are well-defined for the provision of library services. This findings is in line with the report made by The Needs Assessment and Strategic Planning for public Libraries in Northern Ontario (2013) that planning objectives are the major factor in successful management of library, that objective identify the specific, measurable and desired future outcomes that are designed to contribute to the successful fulfillment of

activities is put in place. That means that every aspect of the library services has to be planned for and this may include providing a functional information and technology facilities, financial planning, inter-library services, sharing of resources among others. This finding re-affirms the submission by Kumar (2007) who reported that planning is a continuous process by which the manager determines and evaluates before action, and that planning provides a basic framework of objectives and strategies by which all levels of staff can be guided in decision-making. The above results is supported by Tiwani and Sahoo (2013) who in their study revealed that ICT activities are going through developing stages in the university libraries of Rajasthan in India. The authors submitted that the problems of lack of trained staff, lack of training facilities, delay in bar coding of document and inadequate hardware were faced in all (100%) of the universities libraries while half of the university libraries experienced inadequate management support, as well as participative management and lack of effective planning for ICT utilization. Curiously however, the result of all the findings shows that planning is significantly related to the adoption of Information and Communication Technology and recommended that planning should be a continuous process that needs to be carried out at all stages.

Staffing and the adoption of information and communication technology

The result of the study revealed that there is a significant relationship between staffing and the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria. The finding is in line with the view of Wehrich and Kootz (2005) who said that an organization workforce is its lifeblood, which needs to be managed appropriately. They also reported that staffing is the function of acquiring employees, developing their skills, motivating them to high levels of performance and ensuring that they continue to maintain their commitment to the end so as to attain the organizational objectives. In addition to this report, without human being (staff) machine on his own cannot work nor operate itself, this makes staffing so important in an organization especially in the library where we have different unit/divisions. The findings also show that training of library personnel and increasing their knowledge of tasks can lead to higher performance. The findings of this study is in line with the finding of a similar study conducted by Adeyoyin (2006) who reported that out of 370 professional librarians, only 179 of them were ICT literate while the 191 professional were ICT non-literate, and some of the finding were that there was a need for knowledge acquisition among the librarians in Nigerian University to be able to offer efficient services in the emerging Information and Communication Technology era and that the ICT literacy among the librarians was low and hands-on practical experience was lacking among the librarian in some cases. He therefore recommended that the application of information and communication technology in West African university libraries and their subsequent use require that these technologies should become part of library staff training. The findings also is in accordance with a similar study that was carried out by Ondari-Okemwa (2000) who revealed that there is a need for continuous training of library staff because of the rapid changes in information technology.

This finding equally re-affirmed other studies conducted by Bassey (2006), and Omekwu (2006) expressing that staff training broadens the horizon of the beneficiary, improves performance, improves staff knowledge, qualification and efficiency with a view to make staff more proficient in their job performance. The National University Commission is reported to have approved funds for research, seminars and conferences to encourage staff training and development. A study by Ottong, Okon and Edem (2010) on the analysis of internet use by academics staff reflect a low level of internet access in the university of Calabar because there is no widespread of internet connectivity or planning for ICT for academic staff in their offices for ease of access for online resources. In addition, further analysis of the responses by the librarians revealed that objective appraisal of library staff will motivate them to work hard; this is in support of Aina's (2004) recommendation. The findings also show that management has created enabling environment for staff to perform their library activities. This finding is in line with the finding of kumar (2007) who reported that an enabling environment should be created by management so that staff feel motivated to put in their best at work.

Conclusion

Based on the results of the study, the following conclusions were drawn: the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria is significantly high. Planning of library services, as well as staffing in the library have significant relationships with the adoption of ICT in University libraries in Akwa-Ibom and Cross River States, Nigeria.

Recommendations

Based on the conclusions drawn from this study, the following recommendations were made:

- 1) Proper planning should be made a continuous process so as to improve ICT competences among the information professionals of the university libraries in Akwa-Ibom and Cross River States, Nigeria. This will also ensure effectiveness and efficiency in the record system of all university libraries.
- 2) University libraries should embark on periodic in-house training programmes by way of workshops, conferences, seminars etc for the purpose of skill acquisition. User's education programs should be intensified in order to boost user's confidence in the search technologies and more so now that there are new innovation in ICT world.
- 3) The university libraries should develop a centralized database, linked with other international networks, that includes all documents and sources of information available in the country, in order to support scientific research and to provide decision-makers easy access to information.
- 4) The concerned library authority and the parent institution should provide a comprehensive and continuous training and development programme to the library staff. The training programs should equally include the education of students, lecturers, library staff as well as institution administrators on how to access the internet and search for document or information online.
- 5) Participatory management approach should be adopted to ensure cordiality and cooperation among staff and students.
- 6) Seminar and workshop should be organized from time to time so as to create awareness to student, staff lecturers of the availability, accessibility and utilization of these facilities.

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