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Full Length Research

Effect of Internet Searching Competence and Use on Information Service Delivery by Librarians in University Libraries in South-East Zone of Nigeria

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This study determined the effects of Internet Searching Competence and Use on Service Delivery by Liberians in University Libraries in South East Zone of Nigeria. The study was guided by two objectives, one research question and one null-hypothesis which was tested at 0.05 level of significance. Survey research design was adopted for the study. The target population was all the 189 Liberians working in government owned University Libraries in South East Zone of Nigeria. This includes nine (9) University Libraries as follows: the Anambra State University Uli (ASU), Abia State University Uturu (ABSU), Ebonyi State University Abakiliki (ESUA), Enugu State University of Science and Technology (ESUT) and Imo State University Owerri (IMSU). Others were Federal University of Technology Owerri (FUTO), Nnamdi Azikwe University Awka, University of Nigeria Nsukka (UNN) and Micheal Okpara University of Agriculture Umudike (MOUA). Since the population of the librarians in these Universities was manageable (189), there was no sampling. The research instrument adopted was questionnaire. Data collected were analyzed using: frequency counts, percentages, means, standard deviation, for research question and ANOVA. The following findings were made: the librarians in the Universities in the South-East zone of Nigeria could use ICT to enhance their service delivery to a large extent; their internet searching competence as well as its use has a significant effect on their service delivery. However, it was recommended among others that the University Library Managements in the South-East zone of Nigeria should continue to update the ICT competence of the librarians by exposing them to more seminars, workshops and conferences that will lay emphasis on current trends in the use of ICT.

Key words: Librarians, Internet, Search, Competence, Service, Delivery, Nigeria.

BACKGROUND OF THE STUDY

The internet is defined as a network of networks of millions of computers in the world, communicating and sharing information with each other, using the Transmission Control Protocol/Internet Protocol (TCP/IP). It is an information superhighway that provides unlimited access to a wealth of information on different topics contributed by people throughout the world (Griffith, 2002, and Scholastic, 2003). In spite of the plethora of resources on the Internet, only an Internet literate individual can use the resources for enriching teaching,

learning, and research.

It is important for librarians to acquire basic abilities and skills in internet usage because of its importance to finding information in the contemporary knowledge based society, for their patrons and failure to acquire the abilities would define a new type of illiteracy and alienation from the society. It is based on this scenario that this research on effect of librarian's internet searching competence and use on information service delivery by the librarians working in university libraries in south-east zone of Nigeria was investigated.

STATEMENT OF THE PROBLEM

ICT competence and Utilization by librarians usually lead to effective information service delivery (Oduwole, 2005). However, it was observed by the researchers that acquired information and communication technologies in libraries in south east zone of Nigeria are most often not in use and often covered with dust, showing sign of abandonment. While, the librarians are busy adopting old method of librarianship in rendering services. For instance, instead of the librarians using the internet to search for resources for their patrons, they were busy searching outdated books on the library shelves. Nevertheless, the librarians in this region are still adopting original cataloguing instead of adopting copy catalogue which is available in the internet. All these old methods of rendering services to library patrons usually delay service delivery in the libraries. The question now is, could it be that the ICT facilities have developed faults or that the librarians lacked enough competence to use them, bearing in mind the importance of the ICT facilities in effective service delivery. The reason for this was not clear. Hence, the researchers investigated how competent in the use of Internet searching for effective service delivery were librarians in university libraries in the South-East of Nigeria in the face of the developments in ICT.

OBJECTIVES OF THE STUDY

The objectives of the study were to determine the:

1.   extent of information service delivery by librarians in university libraries in South-East zone of Nigeria;
2.   effect of the librarians' internet searching competence and use on information service delivery by librarians in university libraries in South- East zone of Nigeria;

RESEARCH QUESTION

This study answered the following research question:
What is the extent of the librarians' use of ICT to enhance their information service delivery in South-East zone of Nigeria?

HYPOTHESES

The following null hypothesis was tested:
$H0_1$: There is no significant effect of the librarians' internet searching competence and use on information service delivery in university libraries in South-East zone of Nigeria.

REVIEW OF RELATED LITERATURE

Singh (1998) conducted a research study on the use of Internet by the librarians in Malaysia. The main findings of the study indicated that 90% of the respondents used the Internet for work related purposes. Most of the respondents were recent users.

Ugboma (2006) study was designed to ascertain the level of ICT literacy among practicing librarians in Delta State, Nigeria. A survey involving 104 practicing librarians was conducted. The 104 librarians work in academic, public and special libraries. On a self-assessment basis, respondents revealed that they were more familiar with, and constantly used communication models of mobile telephony 100%, electronic-mail, 65% than other forms of communication like on-line 19% and fax 27%. Data also revealed that respondents were familiar with and used the internet but outside official duties. The study therefore concludes that practicing librarians in the State are yet to be fully ICT literate. Recommendations for improvements are also made.

Akpan-Atata, (2013) investigated the effects of internet competence on librarians' service delivery of 282 academic librarians from the North-West zone of Nigeria. He adopted survey research design. The instrument for the research was close- ended questionnaire. 282 copies of the questionnaire were produced and posted to the librarians. The data generated were analyzed with frequency counts and percentages. The findings of the research showed that 83% of the librarians know how to use the internet for effective service delivery. However, the respondents stated that constant power outages and lack of enough bandwidth were some of their major problems in using the internet. It was then recommended that generators and more internet bandwidth should be acquired.

Akparobore (2013) studied the technical skills of new librarians. The study was centered on academic librarians. They examined ICT competence of 120

librarians in Nigeria. They adopted survey research design. The instrument for the research was questionnaire. The questionnaire was prepared, validated and pretested before adoption. Descriptive statistics (frequency counts and percentages) were used in analyzing the data generated. The findings showed that 87% of the respondents know how to use the internet and e- mail services to enhance their service delivery. However, the librarians claimed that frequent power failure was their main challenge in using the net.

Eyo and Ebaye (2009) conducted a research on effects of information and communication technology on service delivery by librarians in Ondo state. They adopted interview as their instrument for the research. They sampled opinion of 56 librarians who were randomly selected on their internet competence. His findings revealed among others that 76% of the librarians were internet competent. However, 52% of those that agreed that they were internet competent admitted that they applied their internet competence on their job.

Uganneya, Ape and Ugbagir (2012) carried out a research titled "Information services provision and user satisfaction in agricultural research libraries in Nigeria" The study examined the extent to which users are satisfied with reference and circulation services provision by agricultural research libraries in Nigeria. Descriptive survey method was used for the study. Through purposive sampling six agricultural research libraries: (three universities of agricultural libraries and three agricultural research institute libraries) were selected from three out of six agricultural zones of Nigeria. A total of 701 respondents, 241 from agricultural research institute libraries and four hundred and sixty (460) users from university of agricultural libraries were obtained in this study. The study finds out that reference and circulation services were highly provided by the agricultural research libraries in Nigeria. Majority of the users were satisfied with both the reference and circulation services provision by the agricultural research libraries. However, referral service and shelf management of books were rated dissatisfied. Irregular internet services, expensive, internet services, outdated material and staff unresponsiveness were some of the constraints to user satisfaction. The study recommended that there is need for librarians to design system that can facilitate and enhance referral services between the library and users. Adequate shelf management system that would allow proper shelf arrangement of books should also be put in place.

RESEARCH METHOD

Survey research design was used and the entire population of 189 professional librarians in 9 Government (both State and Federal) university libraries that started

operation before 2010 in South East zone of Nigeria was adopted. This includes: Anambra State Universty Uli (ASU), Abia State University Uturu (ABSU), Ebonyi State University Abakiliki, (ESUA), Enugu State University of Science and Technology (ESUT) and Imo State University Owerri (IMSU). Others are Federal University of Technology Owerri (FUTO), Nnamdi Azikiwe University Awka, Nnamdi Azikiwe Library University of Nigeria Nsukka (UNN) and Michael Okpara University of Agriculture Umudike (MOUA). In order to achieve the objectives of the study, a self-constructed questionnaire was used for the study. The questionnaire went through content validity check. Copies of the questionnaire were given to senior colleagues in the profession. The essence of this exercise was to ensure that the questions were clear, simple and appropriate for the study. On the basis of their suggestions and modifications, some of the items were modified to suit the objectives of the study. A final draft of the questionnaire was then prepared and used for the study.

A pretest of the study was conducted using test and re-test method. Twenty (20) librarians from University of Jos were used to test the reliability of the questionnaire. The reliability coefficient of 0.69 was obtained, and the coefficient was considered high enough for reliability (Tiraieyari, et al, 2011). This enabled the researcher to ascertain whether or not the questions asked were able to generate the required data. The questionnaire was then distributed.

METHOD OF DATA ANALYSIS

Data collected were analyzed using Descriptive statistics of frequency counts and percentages for answering the research question, and Inferential Statistical analysis of varience ANOVA for the hypotheses. The Statistical Package for Social Science (SPSS) on personal computer was used for the analysis. All statistical methods that were used for testing the stated hypotheses was based on 0.05 level of significance. Tables were also provided where necessary.

RESPONSE RATE

One hundred and eighty nine (189) copies of the questionnaire were administered to the respondents in all the nine (9) surveyed university libraries in South- East Zone of Nigeria. Out of the 189 copies distributed, 168 (88.9%) were filled, returned and found usable. This gave a response rate of 88.9%.

Table 1: Librarian's Extent of Use of ICT for Enhanced Service Delivery

Librarian's Use of ICT	Weighted Average
Extent of Operating Computer	3.58
Extent of Use of Computer to perform File Management	3.38
Extent of Use of Browser	3.47
Extent of Use of Computer to Search the Internet	3.92
Extent of Use of E-mail Services	4.12
Weighted Average Mean	**3.69**

Source: From Field work

Table 2a: Summary of ANOVA Showing Effect of Internet Searching Competence, Use on Service Delivery ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	100346.375	2	50173.187	.012.	. 180[a]
Residual	302979.358	12	25248.280		
Total	403325.733	14			
$R = 0.499$; $R^2 =$	0.249; Adjusted R^2	$=0.124$			

a. Predictors: (Constant), internet competence, internet use

b. Dependent Variable: service delivery

Table 2b: Analysis showing Effect of Internet Searching Competence and Use on Service Delivery Coefficients[3]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	444.076	91.496		4.854	.000:
(Use) of Internet Searching	-.077	.151	-.155	-.513	.006
Competence on Internet Searching	.409	.217	.568	1.885	.008

a. Dependent Variable: Service Delivery

DATA ANALYSIS

Research Question: What is the extent of the librarian's use of ICT to enhance their Service Delivery in South East zone of Nigeria?

Table 1 shows the Librarians' Extent of Use of ICT to enhance their Service Delivery in the university libraries in South-East zone of Nigeria. To answer the research question, the overall weighted average was 3.69 which indicated large extent. Therefore, the librarians in the universities in South East zone of Nigeria can use ICT (computer) to enhance their service delivery to a large extent.

HYPOTHESES TESTING

The hypotheses formulated to assess the effect of Internet Searching Competence and Use on Service Delivery by Librarians in University Libraries in South-East Zone of Nigeria was ANOVA - since the research was interested in testing 'effect' of one Dependent variable on two Independent variables.

H0$_1$: There is no significant effect of the librarians' internet searching competence and use on service delivery by librarians in university libraries in South-East zone of Nigeria.

Table 2a shows that competence in internet searching as well as its use contributed 12.4% of the total variance in the service delivery of the librarians (Adjusted $R^2 = 0.124$). Thus the effect is shown to be significant ($F_{(2, 12)} = .012$; $p<0.05$). Therefore, the Hypothesis is rejected. Thus there is a significant effect of the librarians' internet searching competence as well as its use on service delivery by librarians in university libraries in South-East zone of Nigeria.

Table 2b shows that the F calculated at .012 to 12 degree of freedom has a t value at -155 for internet use and 0.568 for internet competence. This implies that as $p<0.05$, for both competence and use, there is a significant effect of the librarians' internet searching competence and use on service delivery by librarians in university libraries in South-East zone of Nigeria. Therefore, the Hypothesis is again rejected.

SUMMARY OF FINDINGS

Based on the analysis and presentation of data, the following are
summary of findings:

1.   The librarians in the Universities in South-East zone of Nigeria can use ICT to enhance their service delivery to a large extent.
2.   There was a significant positive effect of the librarians' internet competence and use on service delivery by librarians in university libraries in South-East zone of Nigeria.

DISCUSSION

Research question one sought to find out the extent of the librarian's use of ICT to enhance their service delivery in South-East zone of Nigeria. To answer the research question, the overall weighted mean average obtained from the analysis of Extent of service delivery of librarians in university libraries in South-East zone of Nigeria was 3.69 which indicated large extent. This implies that librarians in the universities libraries in South-East zone of Nigeria can use ICT to enhance their service delivery to a large extent. This finding could possibly be because, the influx of ICT facilities into the academic libraries in Nigeria in the 90s and early 2000s have made librarians to embark on self- development on the use of ICT particularly computer skills. Nevertheless, most academic libraries in Nigeria have developed in-house training of librarians on the basic use of ICT facilities, particularly computers. This could possibly explain why most of the librarians appeared ICT literate. This finding corroborates the works of Okiy (2010) and Oduwole (2005) who on separate occasions stated that large percentage of librarians in the South-East zone of Nigeria are computer literate. They however, lamented the fast deterioration of ICT facilities in most libraries in South-East zone of Nigeria.

   The result of hypothesis tested, revealed that internet searching competence and use had a significant positive effect on service delivery of the librarians. This implies that librarian's internet searching competence as well as its use had significant effect on the service delivery of the librarians in universities in South-East part of Nigeria. The positive relationship implies that increase in a librarians' competence in internet searching and its use brings about increase in their service delivery. This finding could possibly be due to the fact that internet houses a large amount of academic resources. Hence, to remain relevant in this computer era, one must be able to search the net. This fact has forced most academics including librarians to acquire internet searching competence. This finding supports the work of Asemi (2005) and Oduwale,

(2005) who on separate occasions affirmed that the librarians' acquisition and utilization of search engine competence usually lead to effective service delivery. This view also corroborated the work of Akparobore (2013) who in his work, concluded that there was a positive correlation between librarians' internet searching competence and their service delivery. This view was reported by Paul (2005), who claimed that a good knowledge of the internet searching technique usually give rise to effective search and reduced time. This finding was also supported by the works of other scholars {Ojoko (2005) and Uganneya et al (2012)}, who on separate occasions reported the effectiveness of Boolean operators in searching the net. This finding has also shown clearly that internet searching competence is a skill every librarian must acquire especially in this computer age if they are to remain relevant. This is because most important information for teaching, learning and research have gradually migrated to the internet. Hence, only those that have internet searching competence can utilize the information resources in the internet. This finding therefore, has further amplified the positive effect of internet searching competence and its use on service delivery of academic librarians.

CONCLUSION

Results obtained from the analysis, showed that the null hypothesis was rejected, thus indicating that the librarians' Internet Searching competences as well as its use, has a significant positive effect on the service delivery of librarians in university libraries in South-East Zone of Nigeria. Thus, this has revealed that the librarians in the university libraries in South East Zone of Nigeria are ICT competent and also know how to apply their competences to library operations to enhance their service delivery.

RECOMMENDATIONS

1.   It is recommended that the library managements in the universities in South East zone of Nigeria should continue to update the ICT competence of the librarians by exposing them to more seminars, workshops and conferences that will lay emphasis on current trends in the use of ICT. This will update their knowledge, and they will continue to be relevant in this ICT era. The faulty or bad ICT facilities in the libraries should be repaired and put to use for effective service delivery.
2.   The library managements in universities in south east zone of Nigeria should expose the librarians to more practical lectures, seminars and

workshops, and more emphases should be on Internet Searching techniques and how to apply these techniques to library functions like cataloguing and classification, serials management, collection management, budgeting, circulation management, referencing, indexing and abstracting in order to improve information services to library users.

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