

**Full Length Research**

# Effect of E-Mail Competence and Use on Information Service Delivery by Librarians in University Libraries in South-East Zone of Nigeria

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Accepted 5 December 2016

This study determined the effects of E-mail Competence and Use on Service Delivery by Librarians 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 Librarians 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, percentage, means, standard deviation, for research question and ANOVA. The following findings were made: the librarian's competence in e-mail 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 E-mail competence of the librarians by exposing them to more lectures, Seminars and workshops that will lay more emphasis on E-mail competence and how to apply this competence 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. The study concludes that Librarian's competence in E-mail has a significant effect on their service delivery.

**Key words:** Librarians, E-mail, Competence, Service, Delivery, Nigeria

**Cite This Article As:** Nwokedi VC, Samuel N, Amkpa SA (2016). Effect of E-Mail Competence and Use on Information Service Delivery by Librarians in Univesity Libraries in South-East Zone of Nigeria. Inter. J. Acad. Lib. Info. Sci. 4(10): 277-282.

## BACKGROUND OF THE STUDY

Electronic mail is one of the services available through the internet. Electronic mail (e-mail) allows for creation

and transmission of messages, which can be addressed to individuals or group of individuals. The recipient can

access the message, respond to it, store it electronically, forward the message, print it or delete it. Hence, the major Components of e-mail skill include ability to compose a message, address a message, send a message, send a message to multiple recipients, reply a message, forward a message, opening an attachment, print an item message, and retrieve a deleted message. These components of e-mail skill are very important for effective service delivery in the library. For instance, in the reference section of the library, the librarian most often use this e-mail competence to send messages to the library users to notify them of arrival of new books and journals acquired in the library. This in turn increases the information service delivery of the library.

It is important for librarians to acquire basic abilities and skills in E-mail usage because of its positive impact on library functions like serials management, collection management, circulation management, and referencing. Improvements on these functions also lead to improved information service delivery to library users.

Importance of sending and receiving information in the contemporary knowledge based society can never be overemphasized; 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 E-mail 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 (Oduwale, 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 methods 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 visiting lecturers in their offices instead of sending e-mails to them. Nevertheless, the librarians are still adopting original cataloguing and going to local bookshops to source for materials for the library instead of going to 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 E-mail for effective service delivery were librarians in university libraries in the South-East zone 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' E-mail competence and use on information service delivery by the 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:

H<sub>01</sub>: There is no significant effect of the librarians' E-mail competence and use on information service delivery in university libraries in South-East zone of Nigeria.

## REVIEW OF RELATED LITERATURE

Jimba (1997) in his study submitted that e-mail is the most commonly used application of the internet and it has become a standard practice in the scientific community to have an email address. The e-mail makes it possible for two or more people to communicate with each other, collaborate in research, and to share the results of experiments with a wide range of interactive persons from their computer sets. He stated that it is possible for all these to happen within minutes; thus, e-mail has removed the need for postal facilities in communications.

Ugboma (2006) studied the effect of e- mail services on the information service delivery of 26 university libraries in Nigeria. He adopted survey research design, his instrument was questionnaire. The questionnaire was validated and pre- tested before it was administered to 368 librarians. He adopted inferential statistics (ANOVA) to analyze the data generated. His findings revealed that 82% of the librarians claimed to know how to use e- mail

services. However, only a small percentage admitted using them in rendering library services. However, the respondents noted that the major problems they faced in using the e-mail services were lack of computers, constant power failure and internet connectivity. It was then recommended among others that more computers should be acquired for the librarians and internet access should also be provided. Nevertheless, generators should be acquired to power the ICT facilities in case of power failure.

Obiageli (2012) examined the e-mail competence of librarians in the north- East zone of Nigeria. The target population was all the 286 librarians in academic libraries in North- East zone of Nigeria. Survey research design was designed for the study, the instrument for the research was questionnaire, 286 copies of the questionnaire was produced and posted to the librarians. The findings of the research showed that about 86% of the respondents possessed the e-mail competence. However, very few of the respondents 35% admitted using the e-mail competence in their duties in the library. However the respondents claimed that lack of computers and internet access were their major problems. It was then recommended among others that the library management should conduct periodic sensitization for their librarians on the e- mail techniques. It was further recommended that computers and internet access should be provided for the librarians.

Cullen (2009), has highlighted on the effect of e-mail skill of librarians on Selective Dissemination of Information (SDI) and Current Awareness Services (CAS) and concluded that the reference librarian must possess e-mail skill if the librarian is to perform his/her duty effectively. This view corroborates the work of Okiy (2005), who concluded that all reference librarians, must be able to render e-mail services. Nevertheless, Parker and Klemier (2001), Ramesh and Gopalakrishnan (2007), and Salisu (2002), emphasized that Current Awareness Services (CAS) and Selective Dissemination of Information (SDI) are the most important services in any computerized or digital library.

Obaje (2014) researched on the relationship between information and communication technology (ICT) skills and information service delivery among university library personnel of North-Central Zone, Nigeria. Descriptive survey method was used. The target population for the study consisted of 319 library personnel (166 librarians and 153 library officers) and 340 library users. Questionnaire was used as instrument. Data gathered were analyzed using both descriptive and inferential statistics. Analysis revealed among others that the level of ICT skills acquired by library personnel and level of information service delivery in university libraries in the North-Central Zone, Nigeria, were low.

## 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 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 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 researchers 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 Variance 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
<b>Weighted Average Mean</b>	<b>3.69</b>

Source: From Field work

**Table 2a:** Summary of ANOVA Showing Effect of E-mail Competence, Use on Service Delivery ANOVA<sup>b</sup>

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	25654.690	2	12827.345	.041	.674 <sup>a</sup>
Residual	377671.043	12	31472.586		
Total	403325.733	14			

R = 0.252; R<sup>2</sup> = 0.064; Adjusted R<sup>2</sup> = 0.092

a. Predictors: (Constant), email competence, E-mail use

**Table 2b:** Analysis showing Effect of E-mail Competence and Use on Service Delivery Coefficients<sup>3</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	555.378	72.415		7.669	.000
Use Of Email	.145	.207	.301	.701	.049
Competence on Use Of Email	-.039	.242	-.069	-.162	.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 E-mail 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.

**H<sub>01</sub>:** There is no significant effect of the librarians' e-mail competence and use on service delivery by librarians in university libraries in South-East zone of Nigeria.

Table 2a shows that competence in e-mail as well as its use contributed 9.2% of the total variance in the service delivery of the librarians (Adjusted R<sup>2</sup> = 0.092). Thus the effect is shown to be significant ( $F_{(2,12)} = 0.041$ ;  $p < 0.05$ ). Therefore, the Hypothesis is rejected. Thus there is a significant effect of the librarians' E-mail 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 0.041 to 12 degree of freedom have a t value at 0.70 for E-mail use and -162 for E-mail competence. This implies that as  $p < 0.05$ , for both competence and use, there is a significant effect of the librarians' e-mail 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' e-mail competence and use on service delivery by librarians in university libraries in South-East zone of Nigeria.

## DISCUSSION

The research question 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.

Results of the hypothesis tested, revealed that there was a significant positive effect of librarians' e-mail competence and use on service delivery by librarians in university libraries in the South-East zone of Nigeria. This finding supported the work of Oketunji (2000), who said that E-mail is increasingly popular method of communication, especially in the workplace as users communicate quickly and easily with one another. Jimba (1997) in his study corroborated the findings of this research. He submitted that e-mail was the most commonly used application of the internet and it had become a standard practice in the scientific community to have an email address. The e-mail makes it possible for two or more people to communicate with each other, collaborate in research, and to share the results of

experiments with a wide range of interactive persons from their computer sets. He further stated that it was possible for all these to happen within minutes; thus, e-mail has removed the need for postal facilities in communications. Oyedum (2007), and Taylor and Todd (2005), supported the findings of this researches when they claimed that electronic mail had become a boom to the libraries and acts as a powerful bridge between the library staff and the users. Hence, librarians are forced to acquire e-mail competence. The importance of E-mail services to a library can never be overemphasized. These could possibly explain why the librarians must acquire E-mail competence and also use it to enhance their service delivery.

## CONCLUSION

ICT competence and utilization by librarians usually lead to effective information service delivery. However, it was observed by the researchers that acquired information and communication technologies in libraries in south east zone of Nigeria were most often covered with dust, showing sign of abandonment. While, the librarians were busy adopting old methods of librarianship in rendering services. These old methods of rendering services to library patrons usually delay service delivery in the libraries. The reason for this was not clear. Hence, the researcher investigated how competent the librarians were in the use of ICT for effective service delivery in the university libraries in the South-East Zone of Nigeria. Specifically, the study investigated the effect of e-mail competence on service delivery by librarians and extent of service delivery by librarians in university libraries in South-East zone of Nigeria.

The findings of the investigation revealed that the effects of ICT competence and use on service delivery amongst the librarians in the university libraries in South-East zone of Nigeria were positively significant. This implies that the librarians can use ICT (computer) to enhance their service delivery to a large extent. However, all the data obtained on librarians' e-mail competence were subjected to an inferential statistical analysis (ANOVA).

Results obtained from the analysis, showed that the null hypothesis was rejected, thus indicating that the librarians' E-mail competence as well as its use, has a significant positive effect on the service delivery of the librarians in university libraries in South-East Zone of Nigeria. Finally, 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 organize in-house training for their librarians on the basic e-mail technique, 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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