



Perceived Effects of ICT on Knowledge Sharing among Librarian in South-West Nigeria: A UTAUT Theoretical Approach

Ganiyu Oluwaseyi Quadri ^{a,*} and Francis Garaba ^b

^a University of Ibadan, Nigeria

^b University of KwaZulu-Nata, South Africa

* Corresponding author. E-mail: qudriseyi@gmail.com

Research Article

ARTICLE INFORMATION

Article history:

Received 28 October 2019

Received in revised form 27 November 2019

Accepted 28 November 2019

Available online 30 November 2019

Journal of Balkan Libraries Union
Vol. 6, No. 1, pp. 38-46, 2019.

ABSTRACT

This study aimed to examine effects of technology on knowledge sharing among librarians in South-west Nigeria. The study adopted descriptive survey research design and mixed methods research approach. All the 108 librarians were sampled through census/total enumeration technique and 6 university librarians (Head of the Library) amounting to 114. Unified Theory of Acceptance and Use of Technology (UTAUT) theory as a framework was used to underpin the study while post-positivism research paradigm was employed for the study. Data was collected through questionnaire and interview. The quantitative data collected was analysed through SPSS, while qualitative data was analysed using thematic content analysis. The findings revealed that majority of the respondents 54(53%) perceived their level of ICT skills to be medium and that ICT help librarians to locate the various elements relevant to the process of knowledge sharing ($m=4.33$) as well as facilitates quick delivery and dissemination of knowledge ($m=4.21$). The interviewed respondents also supported the findings that ICT has enhanced knowledge sharing practices among the librarians in their libraries. Based on the findings, conclusion and recommendations were made.

Keywords: ICT, Knowledge sharing, Librarians, Perceived effects, South-West, UTAUT.

Copyright © 2019 Balkan Libraries Union - All rights reserved.

I. Introduction

Globally, the role ICT plays on knowledge sharing cannot be overemphasized. Therefore, this study is important in informing professional librarians on the opportunity brought by ICT as well as acquiring required and adequate skills to maximally utilise ICT tools particularly on knowledge sharing. The benefits and capabilities of ICT have transformed the development opportunities that lower the operational efforts required for establishing the foundation for sustainable development and extremely accelerate enhanced productivity improvement afterwards (Detschew 2007:8). The successful exploitation of ICTs usage needs complementary efforts to build up a stock of human capital such as in the practices of human resources management as well as organisational culture and structure, for embracing and adopting new knowledge of technologies (Detschew 2007:11).

The phrase Information and Communication Technology (ICT) has been used interchangeably with

Information Technology (IT). ICT refers to technology which provides access to information through telecommunications (Seena & Pillai 2014). According to Osakwe (2012:39), ICT is defined as an “electronic device used for processing and managing information through software and hardware to store, convert, protect, manipulate, manage, transmit, control, disseminate and retrieve information for the improvement, enhancement and productivity of personal, organisational and institutional activities”. It is important to note that ICT tools and services are being used more efficiently, especially in libraries to cater for the information needs of library users. In this era of library development, librarians must acquire the adequate ICT skills needed to manage and share knowledge in university libraries. It is expected that librarians acquire ongoing knowledge of ICT skills for sharing knowledge and provision of better service delivery (Umeji, Ejedafiru & Ogheneteha 2013).

The emergence and acceptance of ICTs in libraries and information centres has improved knowledge sharing activities and services delivery in university libraries, particularly in developed countries (Virtanen & Neiminen

2002). Dube and Ngulube (2012:73) hold that knowledge sharing and exchange relies heavily on IT infrastructure for the enablement of knowledge creation, capture, management, dissemination and storage. Anna and Puspitasari (2013) affirmed that the adoption of ICT for knowledge sharing among information professionals including librarians has improved significantly in recent times. Therefore, it is necessary for librarians in university libraries to adopt and embrace ICT as well as inculcate requisite ICT skills that will foster knowledge sharing and enhance library routines to push beyond the physical wall of the library (Enakrire & Ocholla 2017).

ICT are regarded as an important and easy key to knowledge sharing among librarians and other information professionals, with innumerable benefits. Hence, ICT are great motivators to efficient knowledge sharing as compared to traditional methods. ICT improve and boost knowledge sharing by eliminating temporal and spatial hindrances between knowledge personnel (Hendriks 1999). This is particularly true as ICT has the capability for greater coverage and scope than traditional methods, when information is shared among librarians. Commenting on the effect of ICT on knowledge sharing amongst librarians, Enakrire (2015) confirmed that easy access and retrieval of information from library databases is being facilitated by ICT even without physical visitation to the library. Furthermore, adequate ICT skills is essential particularly for successful knowledge sharing among student who used the library in Kwara Polytechnic, Nigeria. Nguyo, Kimwele and Guyo (2015:1) established that ICT tools and infrastructure contributed immensely on knowledge sharing amongst state workers in Kenya.

The development and utilisation of ICT in Nigerian university libraries has been a slowly evolving process which involved many successes and failures in the past decades. The history of this process has been marred by the challenges that many university libraries face such as inadequate infrastructure, lack of funding, lack of leadership and training of capacity building (Speirs 2010). The importance of ICT in knowledge management cannot be underestimated in the current knowledge economy (Enakrire & Ocholla 2017). Prior to the emergence of ICT, the management of knowledge (tacit or explicit) has been hindered by many factors such as the slow nature of library acquisitions and processing functions; librarians being overburdened by the large volume of technical/mechanical work; mechanisms (computer, software) utilised in storage and retrieval; and poor organisational motivation which leads to unwillingness to share knowledge (Enakrire & Ocholla 2017). It is against this background that this study investigates the perceived ICT effects on knowledge sharing among librarians in federal university libraries in Southwest Nigeria with emphases on PE construct of UTAUT.

II. Objectives of the Study

The objectives of the study were to:

1. Find out the ICT skills level amongst librarians in the federal university libraries in Southwest

Nigeria; and

2. Ascertain the perceived effects of ICT on knowledge sharing amongst librarians in the federal university libraries in Southwest Nigeria.

III. Theoretical Framework

The study is supported by UTAUT formulated by Venkatesh, Morris, Davis and Davis (2003). The theory was developed through a review and consolidation of eight models that earlier research had adopted to describe technology acceptance and usage behaviour. The rationale of the UTAUT model for this study was inspired by its richness, currency, and high descriptive features, as likened to other technology acceptance and use and knowledge sharing theories. Venkatesh et al. (2003) stressed that previous models were able to describe approximately 40 percent of technology acceptance, whilst on the other hand, the UTAUT was able to explain 70 percent of the intention to use technology. The UTAUT has four constructs and the constructs are defined as thus:

Performance Expectancy: this is defined as “the degree to which an individual believes that using the system will help him/her to attain improvements in job performance”.

Effort Expectancy: is defined as “the degree of ease associated with the use of the system”.

Social Influence: is defined as an “individual perception that a person who is relevant to him/her considers he/she should use the new system” (Venkatesh et al. 2003:451).

Facilitating Condition: this is defined as “the degree to which an individual believes that an organisational and technical infrastructure exists to support use of the system” (Venkatesh et al. 2003). However, this study focused only on Performance Expectancy (EE) which the definition was operationalised as “the degree to which a librarian believes that having ICT skills will enhance knowledge sharing”. The UTAUT is shown in Fig. 1.

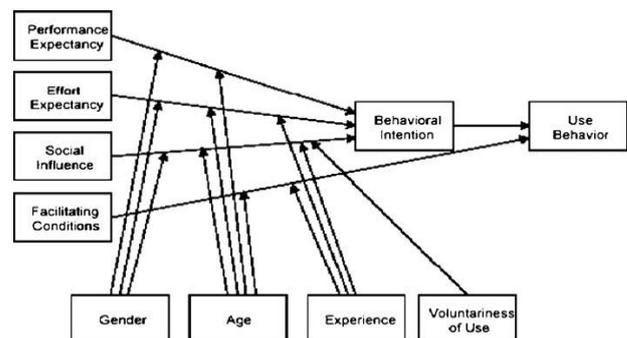


Fig. 1. Unified Theory of Acceptance and Use of Technology (Venkatesh et al. 2003)

IV. Review of Literature

Dhamdhare (2015:166) described knowledge as raw facts that are yet to be processed which is known as data; information is generated based on the facts. knowledge is viewed as an understanding that includes descriptions; facts; information as well as acquired skills via experience. Knowledge sharing is the process of

transporting the personal knowledge from one person to another (Tangaraja, Rasdi, Samah & Ismail 2016). (Frost 2017) stressed that in facilitating knowledge sharing, knowledge management must comprehend with the users' requirement, complexities and potential challenges with controlling sources of knowledge and handling knowledge. Hence, management is required to implement the right frameworks and systems as well as processes that will enable sharing of knowledge particularly in the library. Knowledge sharing is the most pertinent facet of the knowledge process (Yaghi, Barakat, Alfawaer, Shkokani & Nassuora 2011).

Majid and Panchapakesan (2015:30) further noted that the most important motives of knowledge sharing were to enhance and improve the understanding of lessons discussed in class as well as to strengthen good relationship with classmates. The study further revealed that more knowledge sharing is recorded for group assignment with the group members than with another group. Chalak, Ziaei and Nafei (2014) found in their study that 79.2% faculty members in Iranian Library and Information Science (LIS) Department indicated that knowledge sharing had assisted in organising their individual knowledge asset, while 93.7% confirmed it helped in overcoming the challenges which they might encounter in the LIS profession.

Virkus (2012) argues that knowledge sharing as a process is increasingly important to university libraries as most libraries are now considered to function in a knowledge economy. Dhamdhare (2015:172) reported in a survey on importance of KM among higher educational institutes in India and found that librarians and other information professionals are sharing their knowledge with one another through technology particularly the Internet. The study further clarified that ICT as a medium of sharing knowledge is good for research development, and also enhance librarians' knowledge sharing in a consortium. This study was in tandem with that of Anna and Puspitasari (2013:7) who reported a study on knowledge sharing in Indonesian university libraries and found that ICT is significant to support knowledge sharing, particularly in the digital age. The study further affirmed that ICT skills acquired allow librarians to "share in their free time and anytime". In addition, the study also lamented that ICT facilities are essential in developing discussion room with relevant equipment such as computer, projector and the internet networks so as to foster knowledge sharing and encourage virtual collaboration.

IFLA KM Satellite Meeting (2012) identified the benefits of knowledge sharing in special libraries in Athens, Greece. The following advantages were highlighted:

- Knowledge sharing enables better decision making in the library;
- It inspires and motivates free flow of ideas;
- Improvement of customer services as well as satisfaction in the library; and
- It enhances collective library memory.

Shahid and Alamgir (2011:3) revealed that if ICTs are effectively used, they will reduce some knowledge sharing barriers, especially time and space barriers. Hendriks (1999:93, 94) postulates on the huge benefits

brought by ICT and related skills with regards to knowledge sharing among knowledge workers in a workplace. The author further highlighted the benefit that ICT has brought in a university library to enhance knowledge sharing:

- ICT has brought about lowering some obstacles involved in sharing knowledge
- ICT has improved knowledge sharing through teleconferencing and collaboration with one another (Hendriks 1999:94).

Enakrire (2015) lamented on the importance of ICT on knowledge sharing. The author stressed that ICT facilitate easy access and retrieval of information from the library's e-resources without physical visitation to the library wall. The study further confirmed that availability and accessibility of ICT tools and skills seem to be in greater effect, as librarians in South Africa were able to use them to disseminate information as well as sharing knowledge and other library routines. The findings of Enakrire (2015) supported the result of Quadri and Abiodun (2017:38) which found that adequate ICT infrastructure is essential for the successful accessibility and utilization of libraries electronic information resources needed for teaching, learning, research (TLR). The authors further submitted that competencies of ICT skills to access enormous amount of information combined with the ability of students and librarians to convey this information from a particular place to another has tremendous influence on sending; storing; retrieving, sharing as well as disseminating information in the libraries. Nguyo, Kimwele and Guyo (2015:1) indicated in their study that 65.2% of any positive change in knowledge sharing among state sectors in Kenya can be ascribed to ICT. The study further established that ICT tools contributed about 70.1% of positive variability in knowledge sharing; 89.4% in ICT infrastructure; 87.3% in ICT skills, while 97.2% of structural aspects of ICT were found to positively affect variability in Knowledge sharing.

Lawal, Agboola, Aderibigbe, Owolabi and Bakare (2014:30) stressed that knowledge sharing make faculty members in Nigerian universities to be current and keep abreast with up-to-date information in their respective professional areas. Akparobore (2015:35) confirmed that knowledge sharing practices among librarians in the university libraries studies is completely low. The author further argued that in order to improve knowledge sharing in university libraries, librarians must possess adequate skills to manipulate technological tools. Durojaye and Tiamiyu (2016:12) in their study on knowledge sharing among professional surveyors in Lagos metropolis affirmed that knowledge sharing attitude, available ICT infrastructure as well as level of ICT skills predict intention to share knowledge. Nkamnebe, Okeke, Udem and Nkamnebe (2015:29) in their study on extent of ICT skills possessed by librarians in Anambra State reported that librarians are weakly skilled in ICTs. Similarly, Safahieh and Asemi (2010); Siddike (2010); and Mohamed, Madhu and Aswathy (2014)

reported low levels of ICT skills (46.3%) and lack of adequate training programmes among academic librarians, and thus affected knowledge transfer in Chandigarh city libraries in India, Isfahan, Iran and Bangladesh. This finding affirms that low levels of ICT skills and inadequate training programmes are impediments to knowledge sharing among academic librarians.

V. Methodology

Descriptive survey method was employed in this study, owing to its popularity and most commonly used methods particularly in humanities and social sciences (Quadri & Idowu 2016:4). The survey method relies heavily on a questionnaire instrument for data collection.

Population and Sample: All the librarians and university librarians (Head of Libraries) in six federal university libraries across the southwest geopolitical zone of Nigeria: University of Ibadan, Ibadan, Obafemi Awolowo University, Ile-Ife, Federal University of Technology, Akure, Federal University Oye, Oye-Ekiti and Federal University of Agriculture, Abeokuta. There was a total of 114 librarians in the six university libraries, which formed the sample for the study. This is well depicted in Table 1.

TABLE I
POPULATION OF THE STUDY

Institutions	Number of Librarians	University Librarians
<i>UI</i>	29	1
<i>UNILAG</i>	20	1
<i>FUNAAB</i>	22	1
<i>FUTA</i>	11	1
<i>FUOYE</i>	4	1
<i>OAU</i>	22	1
<i>Total</i>	108	6
<i>Grand Total</i>	114	

Instrument: A mixed method approach was adopted with a post-positivism research paradigm (i.e. combination of quantitative and qualitative). A structured questionnaire and semi-structured interview were the instrument used for data collection. The questionnaire had two sections; A and B. Section

A captured the demographic variables of the respondents such as gender, age, educational qualification, etc., while Section B addressed the level of ICT skills and perceived effect of ICT on knowledge sharing amongst librarians in selected university libraries. While the semi-structured interview was conducted with six University Librarians in selected university libraries. The interview questions were open-ended and tailored sequentially and not rigid. The researcher booked an appointment with the selected participants to gather data.

Procedure: The instruments were administered by the researchers, with the help of some staff in the selected university libraries so as to ensure a high rate of response.

Data Analysis: Statistical Package for the Social Sciences (SPSS) was used to analyse the quantitative data, while thematic content analysis was employed to analyse the qualitative data. The data was presented in tables and pie chart.

VI. Results

The results of this study are presented in following sections.

a. Response rate

In this study, 114 librarians participated in the survey. Out of 108 questionnaires administered to librarians, 102 copies of the questionnaire were dully completed and returned, giving a response rate of 94.4%. For the interview schedule (qualitative), all the 6 targeted respondents completed the semi-structured interview, giving a 100% response rate. Bryman (2012:224) and Johnson and Wislar (2012:1805) submitted that the acceptable response rate for survey should not be less than 60%. Therefore, based on the above findings by Bryman and Johnson and Wislar, the response rates obtained for this study were considered suitable.

b. Demographic profile of respondents

Majority of the respondents 23(22%) were in the cataloguing section of the library, 22(22%) were in circulation section while 10(10%) were working in the serials section of the library. Most of the respondents were senior librarians 24(23%) followed by principal librarians 23(22%), while the least of the respondents 8(8%) were assistant librarians. A large proportion of the respondents 56(55%) were female. Majority of the respondents 28(27%) are within 41-45 age bracket while few 2(2%) of the respondents fall within 20-24 age bracket. Also, the table revealed that a large number 65(64%) of the respondents are masters' holders while only 4(4%) hold bachelor's degree. The majority of the respondents 27(26%) have been working for 6-10 years, 21(21%) confirmed that they have been working for 11-15 years while only 2(2%) have been working for 26-30 years. This is depicted in Table 2.

TABLE II
DEMOGRAPHIC PROFILE OF THE RESPONDENTS (N=102)

Demographic information	Frequency	Percent (%)	
Library Section	Circulation	22	21
	Reference	18	18
	Systems	12	12
	Serials	10	10
	Cataloguing	23	22
	Acquisition / Collection development	13	13
	Others	4	4
	Total	102	100.0
	Assistant Librarian	8	8
	Librarian II	15	15
Librarian Rank	Librarian I	22	22
	Senior Librarian	24	23
	Principal Librarian	23	22
	Deputy University Librarian	10	10
	Total	102	100.0
Gender	Male	46	45
	Female	56	55
	Total	102	100.0
Age	20-24	2	2
	25-30	3	3
	31-35	8	8
	36-40	14	14

	41-45	28	27
	46-50	16	16
	51-55	18	17
	56-60	11	11
	61-65	1	1
	66-70	1	1
	Total	102	100.0
Educational Qualification	Bachelor's Degree	4	4
	Master's Degree	65	64
	PhD	33	32
	Total	102	100.0
Work Experience	1-5	17	17
	6-10	27	26
	11-15	21	21
	16-20	19	19
	21-25	7	7
	26-30	2	2
	31-35	9	8
	Total	102	100.0

The profile of the respondents who partook in the semi-structured interviews is shown in Table 3 below.

TABLE III
PROFILE OF THE INTERVIEWEES (N = 6)

	Institution	Profile	Gender	Qualification	Respondents Code
1	University 1	University Librarian	Female	PhD	1
2	University 2	University Librarian	Male	PhD	2
3	University 3	University Librarian	Female	PhD	3
4	University 4	University Librarian	Male	PhD	4
5	University 5	University Librarian	Female	PhD	5
6	University 6	University Librarian	Male	PhD	6

In order to ensure the research ethics and to avoid the identification of the participants, therefore, University of Ibadan will forthwith be referred to as 1, Obafemi Awolowo University as 2, University of Lagos as 3, Federal University of Technology as 4, Federal University of Agriculture as 5 and Federal University Oye Ekiti as 6 in the presentation of the qualitative data.

The first research question for this study sought to ascertain the perceived ICT skills level among librarians in federal university libraries in Southwest Nigeria. The findings indicated that majority of the respondents 54(53%) perceived their level of ICT skills to be medium. This is followed by those who stated that their level of ICT skills is high 32(31%), while only 2(2%) of the respondents acknowledged their level of ICT skills is poor. This is shown in Fig. 2.

This study also gathered qualitative data using the interview schedule. The data from the interview schedule was used to complement the quantitative data. Item 1 of the interview schedule was used to complement research question one as shown in Table 4.

Question 1: How skilful are the librarians in your library in the use of computer technology?



Fig. 2. Perceived ICT skills level of librarians (N= 102).

TABLE IV
INTERVIEW ON LIBRARIANS' SKILLS IN THE USE OF COMPUTER TECHNOLOGY (N=6)

Respondent	Response	
Respondent 1	Librarians are highly skillful in the use of computer technology	High
Respondent 2	Very skillful	High
Respondent 3	Moderately skillful	Medium
Respondent 4	Fairly skillful	Low
Respondent 5	Very skillful	High
Respondent 6	Some are highly skillful while some are average but none is on the side	High

The interview responses were used to corroborate the questionnaire data. As illustrated in Table 4, the university librarians of the selected universities confirmed the quantitative data. Four out of the six university librarians interviewed stated their librarians' ICT skills were high.

The second research question of the study sought to ascertain the effects of ICT skills on knowledge sharing of librarians in federal universities in Southwest Nigeria. The study revealed that the majority of the respondents stated that ICT promotes knowledge sharing 44(43%). Most respondents strongly agreed that having sufficient skills to use social media enhances knowledge sharing 52(51%) and that ICT facilitates new organizational forms for knowledge sharing 43(42%). Finding also showed that ICT promotes dissemination of knowledge to wider audiences 61(60%) while the majority also agreed that ICT facilitates quick delivery and dissemination of knowledge 62(61%). Accordingly, UTAUT model confirmed that using a computer system will improve performance (Venkatesh et al. 2003). The result of this study attested that PE in ICT will facilitate effective knowledge sharing as indicated in Table 5. The table also indicated that all items measuring the effect of ICT on knowledge sharing were positive with mean score of 4 and above.

This study further gathered qualitative data through the interview schedule. The data from the interview schedule was used to complement the quantitative data. Item 2 and 3 in the interview schedule were used to complement research question two. The findings are depicted in Tables 6 and 7.

Question 2: In what ways have ICT improved knowledge sharing in your library?

TABLE V
PERCEIVED EFFECTS OF ICT ON KNOWLEDGE SHARING (N=102)

Performance Expectancy	Strongly Disagreed	Disagreed	Neutral	Agreed	Strongly Agreed	Mean	Std.Dv.
Promoting knowledge sharing and learning	11 (11%)	1 (1%)	46 (45%)	44 (43%)	0%	4.19	1.16
Sufficient skills to use social media enhances knowledge sharing	9 (9%)	1 (1%)	2 (2%)	38 (37%)	52 (51%)	4.27	1.13
ICT facilitates new organizational forms for knowledge sharing such as Online knowledge tram	8 (8%)	2 (2%)	2 (2%)	47 (46%)	43 (42%)	4.30	1.16
ICT helps to locate the various elements relevant to the process of knowledge sharing	8 (8%)	2 (2%)	3 (3%)	36 (35%)	53 (52%)	4.33	1.13
ICT enhances knowledge sharing and solves existing knowledge sharing issues	7 (7%)	2(2%)	2 (2%)	34 (33%)	57 (56%)	4.29	1.09
ICT facilitates quick delivery and dissemination of knowledge	8 (8%)	2 (2%)	30(29%)	62 (61%)		4.21	1.13
ICT promotes dissemination of knowledge to wider audiences	9(8%)	1 (1%)	1 (1%)	30 (30%)	61 (60%)	4.12	1.10
ICT promotes timely dissemination of knowledge	9(8%)	1 (1%)	36 (35%)	56 (55%)		4.20	1.15
ICT provides easy access to knowledge by librarians	9 (8%)	2 (3%)	40 (39%)	51 (50%)	0	4.08	1.20

TABLE VI
INTERVIEW ON HOW ICT HAS IMPROVED KNOWLEDGE SHARING IN THE LIBRARY (N=6)

Respondent	Response
Respondent 1	Easy communication among staff Improved services to end users Enhanced current awareness services, and Selective dissemination of information
Respondent 2	Use in course of duty
Respondent 3	The ICT Skills ideas are exchanged within the staff in form of training and mentoring which in turn improved services delivery
Respondent 4	Faculty can access databases from schools to the main library
Respondent 5	Since all staff are computer literate They can work online anywhere they are and link each other up on any matter relating to service delivery
Respondent 6	No response

Question 3: What ICT infrastructures are in place to improve the skills of librarians in knowledge sharing?

TABLE VII
INTERVIEW ON ICT INFRASTRUCTURES TO IMPROVE LIBRARIANS' KNOWLEDGE SHARING SKILLS (N=6)

Respondent	Response
Respondent 1	Multimedia technology including computers, projectors, telephones and other facilities
Respondent 2	All ICT infrastructure- Hardware and Software
Respondent 3	Provision of computer, internet connectivity, conducive e-classroom, conducive e-discussion room
Respondent 4	Computer sets, Link to internet through radio signal
Respondent 5	We made sure that each librarian is entitled to have computer set and should be internet compliant
Respondent 6	We have the ICT section that are equipped with good computer projector

The interviewed respondents also indicated that ICT skills have effects on knowledge sharing among librarians in Southwest Nigeria. Respondents confirmed that ICT skills knowledge is shared among their librarians and that this enhances knowledge sharing.

VII. Discussion of Findings

The first research question found that librarians in the university libraries perceived their ICT skills level in which majority 54(53%) of librarians perceived their level of ICT skills to be medium. This was followed by those

who believed that they possessed high level of ICT skills 32(31%), while only 2(2%) of the respondents believed their level of ICT skills is poor. This result indicated that the level of ICT skills of librarians in the federal universities in Southwest Nigeria is positive as majority of them falls between medium and high levels. The results were consistent with previous studies which reported similar findings. For instance, Akande (2014) in a study of ICT skills of academic library personnel in Oyo state reported that library personnel in these libraries had acquired basic ICT skills for using the Internet, computer and e-mail. In variance however, Shidi, Igyuve and Tyonum (2015) reported that the low level of skills (14%) and poor skills (2%) exhibited by some respondents indicated that not all librarians possessed the required ICT skills.

In addition, the interview schedule with the university librarians further corroborated the questionnaire data where librarians in the selected university libraries showed high proficiency in ICT. In fact, the first interview respondent in Table 4. As specifically stated that "Librarians are highly skilful in the use of computer technology" which was also supported by other respondents. Earlier studies by Anyaoku (2012) and Osuigwe and Uhegbu (2012) lend credence to this finding. In contrast, Nkamnebe et al. (2015:29) found that professional librarians had weak skill in ICTs.

The second research question found that ICT helps librarians to locate the various elements relevant to the process of knowledge sharing (m=4.33), facilitates new organizational forms for knowledge sharing such as Online knowledge tram among librarians (m=4.30), enhances knowledge sharing and solves existing knowledge sharing issues (m=4.29), while sufficient skills to use social media enhances knowledge sharing among librarians (m=4.27). as shown in Table 5. The implication of this result is that ICT availability in the federal university libraries in Southwest Nigeria has affect the librarian's information sharing habit positively. The findings of the present study was supported by Enakrire and Ocholla (2017) in the same study clearly identified core areas where ICT and the acquired skills can facilitate knowledge sharing by librarians such as: providing information services to users, generating new knowledge for the support of research and curriculum development

processes, offer support for librarians in sending existing knowledge to colleagues in and outside the library; as well as creating new knowledge and filtering former ones. Enakrire (2015) affirmed competence in ICT usage will facilitate easy access as well as retrieval of information.

University librarians in Southwest Nigeria also acknowledged the various ways in which ICT have improved knowledge sharing among librarians in their respective libraries. These include easy communication among staff, improved services to end users, and enhanced current awareness services (CAS). Akparobore (2015) noted that librarians should own sufficient ICT related skills to use technological tools so as to ameliorate knowledge sharing activities in university libraries. Results further showed that ICT have greatly enhanced service delivery in the library including quick information service delivery, possibility to offer part-time services, users get what they want easily and improved networking among libraries. Furthermore, ICT have greatly enhanced services delivery especially in the technical unit (Cataloguing, Serials and Acquisition), reduces the time expended on manual registration, as well as online delivery of library services.

In order to improve the skills of librarians in knowledge sharing, the interviewed respondents stated that certain ICT infrastructures have been put in place such as multimedia technology including computers, projectors, telephones and other facilities, specialised software, internet connectivity, conducive e-classroom, and conducive e-discussion room. Specifically, librarians are furnished with internet-ready computer set each, while a functional ICT unit is put in place. The interviewed respondents also indicated that ICT has positive influence on knowledge sharing among librarians in Southwest Nigeria. Respondents confirmed that ICT skills knowledge is shared among their librarians and that this enhances knowledge sharing. Durojaye and Tiamiyu (2016:12) affirmed that knowledge sharing attitude as well as level of IT skills usage predict intention to share knowledge.

Generally, the result of this study confirmed that PE of ICT facilitates effective knowledge sharing. This is in agreement with Majid and Panchapakesan (2015) who found that knowledge sharing improves lessons discussed and strengthens good relationship among colleagues. This was also supported by Chalak, Ziaei and Nafei (2014) who affirmed that 79.2% of the respondents indicated that ICT related skills acquired had assisted in knowledge sharing. In addition, Anna and Puspitasari (2012) confirmed that PE (competence in ICT) is a prerequisite to sustain knowledge sharing especially in the digital era.

VIII. Conclusion

The study concluded that more than half of the librarians perceived their levels of ICT skills to be medium level and a large number of the librarians equally indicated that they possessed excellent and above-average level. The university librarian interviewed also corroborated the above assertion by affirming that librarians' in their respective libraries had high ICT skills. Also, ICT acquired by the librarians had positive effect on knowledge sharing. The librarians acknowledged that ICT

help to promote knowledge-sharing, facilitate dissemination of knowledge to wider audience, enhance knowledge sharing and solve existing knowledge sharing issues, among others. In addition, the university librarians interviewed also affirmed that ICT have positive effects on librarians' knowledge sharing and that ICT enhances librarians' knowledge sharing as well as facilitate quick delivery of information with ICT infrastructure in place. The PE of UTAUT was found to have positive influence on librarian's knowledge sharing in South-West Nigeria.

IX. Recommendations

1. Librarians are urged to continue updating their ICT skills regularly through seminars, workshops, conferences and remedial courses in information technology.
2. Librarians are encouraged to continue to share ICT-related skills among themselves, as this will facilitate knowledge sharing.
3. Library management should endeavour to have technical personnel in place to assist librarians in solving ICT related issues that may hinder knowledge sharing practices.

X. Limitations

This study is limited to the librarians who participated in the study and employed in the federal university libraries in South-West Nigeria. This study is a case study; hence, its findings and results cannot be generalised.

XI. Acknowledgement

The authors thank the librarians and library head in the sampled university libraries who partook in the study.

References

- Akande, S. O. (2014). ICT skills of library personnel in a changing digital library environment: a study of academic libraries in Oyo State, Nigeria. *Information Technologist*, 11(1), 76-85.
- Akparobore, D. (2015). Knowledge sharing among librarians in university libraries in Nigerian. *Information and Knowledge Management*, 5(2), 31-35.
- Anna, E. V., & Puspitasari, P. (2013). Knowledge sharing in libraries: a case study of knowledge sharing strategies in Indonesian university libraries. *Paper presented at the IFLA WLIC conference* held in Suntec, Singapore, August 17-23, 2013. Retrieved on August 13, 2019 from <http://library.ifla.org/200/1/207-anna-en.pdf>.
- Anyaku, E. N. (2012). Computer skills set of librarians in Nigeria: confronting the stereotype. *Annals of Library and Information Studies*, 59, 128-134.
- Bryman, A. (2012). *Social research methods*. (4th Ed.). New York: Oxford University Press.
- Chalak, A. M., Ziaei, S., & Nafei, R. (2014). A survey of knowledge sharing among the faculty members of Iranian

- library and information science (LIS) departments. *Library Philosophy and Practice (e-journal)*, paper 1063. Retrieved on August 16, 2019 from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2631&context=libphilprac>
- Detschew, S. (2007). *Impact of ICT in the developing countries on the economic growth: implication derived from theory and empiricism*. Unpublished thesis. Technical University of Ilmenau. Institut für Wirtschaftswissenschaften.
- Dhamdhere, S. N. (2015). Importance of knowledge management in the higher educational institutions. *Turkish Online Journal of Distance Education*, 16(1), 162-183.
- Dube, L., & Ngulube, P. (2012). Knowledge sharing in a multicultural environment: challenges and opportunities. *South African Journal of Library and Information Science*, 78(1), 68-78.
- Durojaye, K. A., & Tiamiyu, M. A. (2016). Knowledge sharing by professional surveyors in estate firms in Lagos metropolis, Nigeria. *Journal of Information Science, Systems and Technology*, 1(1), 12-26.
- Enakrire, R. T. (2015). *The use of information and communication technologies for the support of knowledge management in selected academic libraries in Nigeria and South Africa*. Unpublished thesis (PhD). University of Zululand. Department of Library and Information Studies.
- Enakrire, R. T., & Ocholla, D. N. 2017. Information and communication technologies for knowledge management in academic libraries in Nigeria and South Africa. *South African Journal of Information Management*, 19(1).
- Frost, A. (2017). *Knowledge management tools*. Retrieved on August 28, 2019 from <http://www.knowledge-management-tools.net/different-types-of-knowledge.html>
- Hendriks, P. (1999). Why share knowledge? The influence of ICT on the motivation for knowledge sharing. *Knowledge and Process Management*, 6(2), 91-100.
- IFLA KM Satellite Meeting. (2012). *Why special libraries are the right places to host a knowledge management centre*. IFLA, Helsinki, Finland. Retrieved on August 22, 2019 from http://www.arpalazio.net/ifla2012/html/abstracts_and_full_papers.pdf/Semertzaki.pdf
- Johnson, T. P., & Wislar, J. S. (2012). Response rates and nonresponse errors in surveys. *Journal of the American Medical Association*, 307(17), 1805-1806.
- Lawal, W. O., Agboola, I. O., Aderibigbe, N. A., Owolabi, K. A., & Bakare, O. D. (2014). Knowledge sharing among academic staff in Nigerian university of agriculture: a survey. *International Journal of Information Library and Society*, 3(1), 25-32.
- Majid, S., & Panchapakesan, C. (2015). Perception and knowledge sharing behaviour of pre-university students. *International Information and Library Review*, 47(1-2), 30-38.
- Mohamed, H. K., Madhu, E. S., & Aswathy, T. A. (2014). Information and communication technology competency of library and information science students in Kerala. *Paper presented at 59th International Conference on Managing Libraries in the Changing Information World* held in Mahatma Gandhi Central Library, Roorkee, India, February 22-24, 2014.
- Nkamnebe, E. C., Okeke, I.E., Udem, O. K., & Nkamnebe, C. B. (2015). Extent of information and communication technology skills possessed by librarians in university libraries in Anambra State, Nigeria. *Information and Knowledge Management*, 5(9), 22-31.
- Osakwe, R. N. (2012). Problems and prospects of using information and communication technology for record keeping in tertiary institution in Nigeria. *Journal of Education and Practice*, 3(14), 39-43.
- Osuigwe, N. E., & Uhegbu, A. N. (2012). Status of information technology skills among librarians in the information age: case study of Anambra State Library Board. *Library and Information Science Digest*, 6(1), 70-90.
- Quadri, G. O., & Idowu, O. A. (2016). Social media use by Librarians for information dissemination in three Federal university libraries in Southwest Nigeria. *Journal of Library and Information Services in Distance Learning*, 10(1-2), 30-40.
- Quadri, R. F., & Abiodun, O. S. (2017). Evaluation of ICT literacy skills among students of federal polytechnic Offa, Kwara State, Nigeria: a review of related literatures. *Science Research Journal of Energy*, 2(2), 27-41.
- Safahieh, H., & Asemi, A. (2010). Computer literacy skills of librarians: a case study of Isfahan university libraries, Iran. *The Electronic Library*, 28(1), 89-99.
- Seena, S. T., & Pillai, K. G. S. (2014). A study of ICT skills among library professionals in the Kerala University Library system. *Annals of Library and Information Studies*, 61, 132-141.
- Shahid, A., & Alamgir, R. (2011). *ICT enabled knowledge sharing-impact of ICT on knowledge sharing barriers: the case of Avanade*. Unpublished thesis (Masters). Department of Ethics and Business Law, Malardalen University.
- Shidi, H., Igyuve, S., & Tyonum, N. (2015). A study of information and communication technology (ICT) skills of staff of tertiary institutions in Benue state, Nigeria. *Information Technologist*, 12(2), 89-92.
- Siddike, K. (2010). Exploring digital literacy competencies among the library and information professionals of Bangladesh: problems and recommendations. *Paper presented at 55th National Conference of ILA*, Birla, India, January 21-24, 2010.
- Speirs, M. (2010). *The development of Information and Communication Technologies in Nigerian Libraries*. Retrieved on August 18, 2019 from http://eprints.rclis.org/14464/2/The_Development_of_Inf

Tangaraja, G., Rasdi, R. M., Samah, B. A., & Ismail, M. (2016). Knowledge sharing is knowledge transfer: a misconception in the literature. *Journal of Knowledge Management*, 20(4), 653-670.

Umeji, E. C., Ejedafiru, E. F., & Oghenetega, L. U. (2013). Information/ICT literacy levels and skills among librarians in Madona University Library, Ikija. *IOSR Journal of Humanities and Social Science*, 15(3), 70-75.

Venkatesh, V., Morris, M. Davis, G., & Davis, F. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478.

Virkus, S. (2012). *Knowledge sharing systems*. Retrieved on August 12, 2019 from http://www.tlu.ee/~sirvir/Information%20and%20Knowledge%20Management/Knowledge%20Sharing%20System%20s/the_concept_of_knowledge_sharing.html

Virtanen, J., & Neiminen, P. (2002). Information and communication technology among undergraduate dental students in Finland European. *Journal of Dental Education*, 6(4), 147-152.

Yaghi, K., Barakat, S., Alfawaer, Z. M., Shkokani, M., & Nassuora, A. (2011). Knowledge sharing degree among undergraduate students: a case study at applied science private university. *International Journal of Academic Research*, 3(1), 20-24.



Ganiyu Oluwaseyi QUADRI is a librarian at Kenneth Dike Library, University of Ibadan, Nigeria and a PhD student in the Department of Information Studies, University of KwaZulu-Natal, South Africa.

Mr. Quadri was born at Ibadan, Oyo State Nigeria on the 12th February, 1985. Quadri bagged his first degree in Educational Management/Economics from the University of Ibadan, Ibadan, Oyo State, Nigeria in 2007 and Masters' degree in Library and Information Studies in the same University in 2011 where he graduated with PhD grade.

Mr. Quadri major field of study are knowledge management, e-resources, ICT in related to librarianship, social media in libraries.

He has published in reputable journals both locally and internationally and his research articles have been cited globally with about 95 citations. Currently, he has an article in Libri Journal under review.

Mr. Quadri is a member of learned organisation such as Nigeria Library Association (NLA), Nigerian Institute of Management (NIM), Special Interest Group on Information Retrieval (SIGIR), Association of Computing Machinery (ACM), Council for the Development of Social Science Research in Africa (CODESRIA)



Francis GARABA is a Senior Lecturer in Archival Studies at the University of KwaZulu-Natal (UKZN).

Dr. Garaba bagged his bachelor's degree at University of Zimbabwe, Masters and PhD degree in Information Studies at University of KwaZulu-Natal (UKZN).

His research interests include records and archives management in national liberation movements, schools and colleges, churches and sports associations.

Dr. Garaba has worked for the National Archives of Zimbabwe as an archivist and as a Manuscript Librarian at the Lutheran Theological Institute Library, in Pietermaritzburg, South Africa. He has also worked at the Midlands State University in Zimbabwe and at the University of Fort Hare (UFH) as a lecturer in records and archives management.