Survey of Attitude Towards ICTS and Use of ICTS for Service Delivery by Librarians in University Libraries in Edo State

Aiyebelehin, J.A.¹, Ekpoma¹ Ikenwe, I.J², Okpetu, C.³

Department of Library and Information Science, Ambrose Alli University,
Department of Library and Information Science, Ambrose Alli University, Ekpoma²,
Ambrose Alli University, Ekpoma³

jamesaferich@gmail.com¹

Abstract

Purpose: The study surveyed the attitude towards ICTs and use of ICTs for service delivery by librarians in university libraries in Edo state

Design/Methodology/Approach: Descriptive survey design was used for the study. The population of the study comprised professional and para-professional librarians in Ambrose Alli University library, Benson Idahosa University library and John Harris library, university of Benin. The total enumeration sampling technique was used to select the whole 122 professional and para-professional librarians in the three libraries. Questionnaire was used to gather data for the study and the data collected were analyzed with the use of tables and percentages

Findings: The findings show that librarians majorly used computers (100%), Telephone (97%) and Printers (85.7%). The findings also show that majority (98%) of the respondents use the ICTs to assist researchers while 100% of them use ICTs in answering user queries. It was equally revealed that the librarians have positive attitude towards ICTs use. This is based on the fact that the respondents generally refused the negative attitude scale while they completely accepted the positive attitude scale. The major factors influencing the formation of the attitude towards ICTs by the librarians were found to be peer opinion (100%) and knowledge of available ICTs (97.6).

Implication: The conclusions of this study imply that utilization of ICTs depend greatly on the attitude of librarians towards ICTs. Where there is positive attitude utilization will increase but where there is negative attitude available ICTs will be underutilized. Hence, to improve utilization of available ICTs for service delivery, the attitude of librarians must be worked on through exposure and training in the use of emerging technologies.

Originality/Value: the originality of this study lies in the finding that ICT utilization depends on attitude of librarians and not just availability and accessibility.

Keywords: Academic Libraries, Attitude, ICTs, Librarians, University Libraries, Library Service Delivery, Nigeria

Paper type: Empirical research

Introduction

Libraries are primarily storehouses of information resources for the development of human intellectual capacity. The library has the role of acquiring, processing, primary organizing, preserving as well as conserving the printed and non-printed information resources or materials for the use of their clientele (Martins, 2011). Academic libraries are majorly libraries established in academic institutions such as universities and polytechnics to supply the information resources required for teaching, learning, and research. In academic institutions today, the invention and evolution of both the internet and the technological devices that allow

us to access the internet (and access each other through the internet) have revolutionized the way a person can research, learn, and spread new ideas.

For academic libraries to effectively carry out their tasks in this 21st century librarians must adopt emerging technologies. As Omoniwa (2001) has posited, in the twenty-first century, globalization of information and the adoption of information technology will be the hallmark of great libraries. The size of libraries or their collections may not be the benchmark but rather accessibility to the major thrust of the library automation. For any library to derive maximum benefit in this information age, it has to be online. As technology becomes more

sophisticated and more affordable, the range of services that are provided by libraries also library clienteles the librarian must embrace emerging technologies.

Ramzan (2004) have pointed out that the situation with regard to IT usage in developing countries like Nigeria is not encouraging. He noted that veteran educators and librarians have observed that while developing countries were prone to implement information technologies, and librarians in Nigeria were also not prepared to embrace the changes forced upon them by new technologies; by explaining that most of them were uncertain about ICT applications in their libraries and the ultimate benefits to their parent organizations. One of the primary factors hindering ICT application has the attitude of librarians towards technology.

Attitude in this regard refers to a learned emotionally toned disposition to react in a consistent way favourable or unfavourable towards a person, object or idea. Generally, attitude may be defined as the total of a man's inclination and feelings, prejudices or bias, preconceived notions. ideas. fears convictions about any specific topic. Attitudes have been used to represent perceptions of librarian on the value attached to ICT in libraries. technical processing, organization and user services. It represents the conceptual value of these technologies in the minds of the library staff, not the values of these technologies (Islam and Islam, 2007).

While it is true that the change and the revolution of library practices will continue as new ICT is being invented and introduced, it should be noted as well that there is need for the librarians especially those in developing countries like Nigeria to develop positive attitude combined with the satisfaction derived from their job towards the effective utilization of ICT in university libraries. This study was designed to survey the attitude of librarians towards ICTS in university libraries in Edo state.

Objectives of the Study

The general objective of this study was to survey librarians' attitudes towards ICTs in selected university libraries in Edo State. The specific objectives of this study are:

- 1. To find out librarians use available ICTs
- 2. To examine the frequency of ICT use by librarians.

increases. In this regard to meet the needs of the.

- 3. To investigate the purpose of ICT use by librarians in the library.
- 4. To examine the attitude of librarians towards ICTs use for service delivery
- 5. To find out factors that influence the attitude of librarians towards ICT use service delivery

Literature Review

Concept of Attitude

Attitudes are "inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic" (Taiwo, 2008). Albert (2005) states that an attitude "is a mental and natural state of readiness organized through experience exerting directive or dynamic influences upon individual's response to all objects or situations with which it is associated." This study explores the response and readiness of library staff to ICT applications. Attitudes represent the conceptual value of these technologies in the minds of the librarians, not the values of the technologies themselves.

The theory of reasoned action suggests that, a person's behavioural intention depends on the person's attitude about the behavior and subjective norms (BI=A+SN). (Fishbein, 1980). A person's intentions are themselves guided by two things: the person's attitude towards the behavior and the subjective norm. behavioral intention measures a person's relative strength of intention to perform behavior. Attitude consists of beliefs about the consequences of performing the behaviour multiplied by his or her valuation of these consequences. Subjective norm is seen as a combination of perceived expectations from relevant individuals or groups along with intentions to comply with these expectations. In other words, the person's perception that most people who are important to him or to her think he should not perform the behavior in question (Ajzen and Fishbein, 1980).

According to Ajzen and Fishben (1980) if people evaluate the suggested behavior as positive (attitude) and if they think other people want them to perform the behavior (subjective norm), it results in a higher intention (motivation) and they are more likely to do so. To put the definition into simple terms, a person's volitional (voluntary) behavior is predicted by his or her attitude towards that behavior and how

he or she thinks other people would view them if they perform the behavior. A person's attitude, combined with subjective norms, form his or her behavioural intention.

Concept of ICT and ICT Application in Libraries

The study by Dillion and Morris (2006) suggested that attitude influences the application and subsequent actual use of ICTs. Bigozzi, Davis and Warshaw (2012) argues that because new technologies are complex and an element of uncertainty exists in the minds of decision makers with respects to their successful adoption, people form attitudes and intentions towards trying to learn to use the new technology prior to initiating efforts directed at using it. Attitudes towards usage and intentions to use might be ill formed or lacking in conviction or else might occur only after preliminary strivings to learn to use the technology evolved. Thus, actual application might not be a direct or immediate consequence of such attitudes and intention.

Cholin (2005) studied applications of ICT in Academic Libraries. According to them the main areas of application are: Library Automation , Library Networking Library Management: Digital Library

According to Walmiki and Ramakrishnegowda (2009) application of ICT in libraries enhances users' satisfaction. It provides numerous benefits to library users. Some of the benefits of the application are:

- Provide speedy and easy access to information
- Provides remote access to users
- Provides round the clock access to users
- Provides access to unlimited information from different sources
- Provides information flexibility to be used by any individual according to his/her requirements
- Provides increased flexibility
- Facilitates the reformatting and combining of data from different sources.

Attitudes of Library Staff to ICT Use in Libraries

According to Spacey et al., (2013), attitudes, chiefly positive attitudes, are assumed to be fundamental in the acceptance, implementation and success of new technologies. Literature relating to people's views of technology is

expressed in terms of attitudes to technology or attitudes to change (Spacey et al., 2013). For ICT systems to be successful, it is suggested that staff need positive attitudes to ICT (Fine, 2006; Evald, 2006). Attitudes have been suggested to influence behaviour but the research in this area is varied in its conclusions. Social psychologists, Fishbein and Ajzen (2005) submitted in the Theory of Reasoned Action (TRA) that an individual's behaviour is determined by one's intention to perform the behaviour, and that this intention is influenced jointly by an individual's attitude and subjective norm (the latter is a measure of how people are influenced by their peer's opinions).

Applying this understanding to an individual's acceptance of management information systems, the Technology Acceptance Model (TAM) (Davis, 1989) suggested attitude influences behavioural intention to use, and subsequent actual use. TAM also includes the constructs of perceived usefulness and perceived ease of use. Perceived usefulness is the extent to which a person believes that using a system (or computer programme, for example) will enhance their performance, whilst perceived ease of use is the extent to which a person believes that use of the system will be free from effort. These two constructs have an important impact on a person's attitude toward using the system but, unlike the TRA, Davis found that attitude did not completely mediate between beliefs intentions (Mathieson, 2011). This suggests that an individual could hold negative attitudes to a system, but would still use it because it has highperceived usefulness (Dillon and Morris, 2006).

The success of any initiatives to implement technology in an educational program depends strongly upon the support and attitudes of people involved. It has been suggested that if librarians believed or perceived proposed computer programs as fulfilling neither their own or their students' needs, they are not likely to attempt to introduce technology into their teaching and learning. Among the factors that affect the successful use of technology in library are librarians' attitudes towards computers (Huang & Liaw, 2005). Attitude, in turn, constitutes various dimensions. Some examples of these are perceived usefulness, computer confidence (Rovai & Childress, 2002), training (Tsitouridou & Vryzas, 2003), gender (Sadik, 2006), anxiety, confidence, and liking (Yildirim, 2000).

Research Methodology

Descriptive survey design was used for the study. The population for the study comprised professional and para-professional librarians in Ambrose Alli University library, Benson Idahosa University library and John Harris library, university of Benin. The total enumeration sampling technique used to select the whole 122 professional and para-professional librarians. That is 28 in Ambrose Alli University library, 21 in Benson Idahosa University library and 40 in John Harris library.

The questionnaire was used as the instrument for collecting data. The instrument used for this study was tagged "Attitudes and Use of ICT's Scale (AUICT)". In analyzing the data collected from the field, the descriptive statistics specifically tables and percentages were used. All these were done using the Statistical Package for Social Sciences (SPSS).

Presentation and Analysis of Data

Out of the 122 questionnaires administered, 84 were retrieved to produce a return rate of 94.3%.

Data Presentation and Interpretation

Table 1: Age of respondents

0 1		
Age (years)	Frequency	Valid Percent
25-34	12	14.3
35-44	40	47.6
45-54	28	33.3
55 and above	4	4.8
Total	84	100.0

Table 2: Education of respondents

-	_	
Education	Frequency	Valid Percent
OND/Diploma	14	16.7
B.Sc/HND	35	41.7
Masters	24	28.6
PhD	11	13.1
Total	84	100.0

Table 3: Length of service

.		
Duration (years)	Frequency	Valid Percent
1-5	10	11.9
6-10	30	35.7
11-15	32	38.1
16-20	9	10.7
21 and above	3	3.6
Total	84	100.0

Table 1 shows that out of the 84 sampled respondents, 12 representing 14.3% were between 25-34 years old, 40 representing 47.6% were between 35 – 44, 28 representing 33.3% were between 45 -54, and the least which is 4 were 55 and above.

Table 2 shows that majority of the respondents have B.Sc./HND (41.7%) and Masters degrees (28.6%).

Table 3 shows that out of the 84 sampled respondents, 10 representing 11.9% had work experience between 1 to 5 years; 30 representing 35.7% had 6-10 years work experience; 32 representing 38.1% served between 11 to 15 years, 9 (10.7%) had served between 16 to 20 years, while 3 which is the least length of service were those that had served for 21 years and above.

Table 4: Use of available ICTs

S/No	Which of the following ICTs do you use for service delivery?	Yes (%)	No (%)
1	Computers	84 (100%)	-
2	Computers connected to internet	55 (65.5%)	29 (34.5%)
3	CD – ROM	57 (67.9%)	27 (32.1%)
4	Telephone	82 (97.6%)	2 (2.4%)
5	Fax machine	3 (3.6%)	81 (96.4%)
6	OPACs	36 (42.9%)	48 (57.1%)
7	Printer	72 (85.7%)	12 (14.3%)
8	E-book	40 (47.6%)	44 (52.4%)

Table 5: Frequency of use of available ICTs by librarians

S/No	How often do you use the available ICTs?	Daily (%)	Weekly (%)	Monthly (%)	Never (%)	
1	Computer	82 (97.7)	-	2 (2.3)	-	
2	Computers connected to internet	55 (65.5)	15 (17.9%)	7 (8.3)	7 (8.3)	
3	CD – ROM	49 (58.3)	24 (28.6)	6 (7.1)	5 (6.0)	
4	Telephone	84 (100.0)	-	-	-	
5	Fax machine	-	-	3 (3.7)	79 (96.3)	
6	OPACs	10 (12.0)	19 (22.6)	7 (8.3)	28 (33.3)	
7	Printer	54 (64.3)	19 (22.6)	9 (10.7)	2 (2.3)	
8	E-book	20 (23.8)	39 (46.4)	15 (17.9)	10 (11.9)	

From Table 4 it can be seen that the respondents mostly used computers (100%), Telephone (97%) and Printers (85.7%) rendering services to users while the Fax machine was almost not used except by just 3.6% of the respondents.

Table 5 reveals that the respondents used the computer and phones on daily basis in the process of service delivery while the fax is used on a monthly basis by a meager minority (3.6%).

Table 6: Purpose of use of ICTs by librarians

	For what purpose you use ICTs in the library?	SA	(%)	A	(%)	D (%)	SD (%)
1	To help users doing research to find the information they need	52	(61.9)	31	(36.9)	1 (1.19)	-
2	Digitizing collections for online access	24	(28.5)	55	(65.5)	5 (6.0)	-
3	Answering incoming reference question via telephone, email, fax and chat	37	(44.0)	47	(56)	-	-
4	For collaboration interactivity	28	(33.3)	53	(63.1)	1 (1.2)	2 (2.4)

Table 7: Attitude of librarians towards the use of ICTs

	Variables	SA (%)	A (%)	D (%)	SD (%)
1	ICTs will only put more work on the shoulder of librarians.	-	-	34 (48.6)	36 (51.4)
2	I can't think of anyway that ICTs will enhance my career as a librarian.	-	1 (1.4)	34 (48.6)	35 (50.0)
3	ICTs are not exciting to use.	-	1 (1.4)	31 (44.3)	38 (54.3)
4	I avoid using ICTs whenever I can.	-	-	29 (41.4)	41 (58.6)
5	Capable librarians do not need ICTs to operate in the library efficiently.	-	4 (5.7)	27 (38.6)	39 (55.7)
6	Use of ICTs in libraries reduces the personal treatment of library users.	9 (12.9)	8 (11.4)	28 (40.0)	25 (35.7)
7	I think that ICTs are very easy to use.	42 (60.0)	27 (38.6)	1 (1.4)	-
8	I feel comfortable working with ICTs.	49 (70.0)	19 (27.1)	2 (2.9)	-
9	ICTs will create more jobs than they eliminate.	28 (40.0)	21 (30.0)	17 (24.3)	4 (5.7)
10	ICTs dehumanizes society by treating everyone as a number.	4 (5.7)	12 (17.1)	41 (58.6)	13(18.6)
11	ICTs isolate people by inhibiting social interaction.	16 (22.8)	29 (41.4)	13 (18.6)	12 (17.1)

Table 6 shows that majority (98%) of the respondents primarily use the available ICTs to assist researchers while the 100% of the respondents use the ICTs answering user queries. And this follows from the responses on the use of telephone where the whole respondents also agreed to using it daily

From Table 7 it can be deduced that the librarians have positive attitude towards ICTs use for information service delivery. This is obvious based on the fact the respondents generally refused the negative attitude scale while they completely accepted the positive attitude scale.

Table 8: Factors that Influence the Attitude of Librarians toward ICT

	Variables	SA	(%)	A	(%)	D (%)	SD (%)
1	Peer opinion	52	(61.9)	32	(38.1)	-	-
2	knowledge of ICTs	17	(20.2)	65	(77.4)	2 (2.4)	-
3	Level of support at work	34	(40.5)	31	(57.1)	18 (21.4)	1
4	Access to ICTs	28	(33.3)	45	(63.1)	11 (13.1)	-
5	Possession of ICT library skills	28	(33.3)	47	(55.9)	7 (8.3)	2 (2.4)

Table 8 reveals the major factors influencing the formation of the attitude towards ICTs by the librarians are peer opinion (100%) and knowledge of available ICTs (97.6).

Discussion of Findings

The findings show that there is considerable use of ICTs for service delivery in the libraries studied. However, crucial ICT tools such as OPACs, E-books and fax machines were rarely used. This is probably due to the fact that they are expensive and in most cases not available for librarians to use. The findings also show that tools like computers, telephone, printers and CDROM were used by librarians on daily and weekly basis. This suggests that rudiment ICT tools were used daily by the librarians.

The majority of respondents sampled in this study showed positive attitude towards use of ICTs. In this regards, 98% responded that ICTs are easy to use while about 87% feel comfortable working with ICTs. This finding is in variance to findings of Igberia, Johnson, & Chakrabarti (2012), who found that there is widespread fear and negative attitude that have slowed progress of ICT implementation. The reason for this variance could be due to the time lag and the widespread ICT training in the Nigerian library scene. This is perhaps why Shuva (2005) opined that librarians attitude to the use of the information communication technology in the library depends largely on the influence of the ever changing digital landscape.

The findings equally revealed a host of factors influencing the librarian's positive attitudes towards ICTs. These include peer opinion /influence, knowledge of ICT, and possession of ICT literacy skills.

Conclusion

ICTs have undoubtedly changed the information management landscape all over the world. However, the reality in developing nations such as Nigeria has not been encouraging, although there have improvements in recent times. From the findings of this study, it can be seen that librarians' use of ICTs for information service delivery depends largely on their attitude to technology. With positive attitudes librarians tend to use available ICTs effectively while negative attitudes have capacity to leave available ICTs unused or underused for information service delivery. Factors that lead to attitude formation such as exposure to ICT, training, and peer influence are controllable factors; hence, ICT utilization by librarians can be tremendously increased when attention is paid to these factors.

Recommendations

Based on the findings of this study the following has been recommended to drive increased use of ICTs for information service delivery:

- there should be procurement and training in the use of fax machine, provision of adequate computer facilities, purchase and servicing of official telephone
- librarians should be exposed and trained on how to use emerging technologies for service delivery in the library
- the library work environment should encourage peer interaction and knowledge transfer by organizing regular in-house trainings and train-thetrainer seminars
- librarians should be giving grants to tour libraries in foreign countries

References

- Ajzen .I. and Fishbein M. (1980). Technology Acceptance Model (TAM) *International Journal* of Manpower. 2 (11) 7.
- Albert N,O. (2005). *Training for IT, Library Training Guides*. London: Library Association.
- Attwell F.K. and Rule, G.S. (2004) Occupational role stress on women librarians: a study. SRELS. *Journal of Information Management*. 40.2: 201-14.
- Bigozzi, C.O., Davis A.L. and Warshaw, L.S (2012). Techno stress in libraries: Causes, effects and solutions. *The Electronic Library*, *5*, pp. 282-7.
- Cholin, V.S (2005), study of the application of information technology for effective access to resources in India in university libraries. *The Internation Information & Library Review*, 37(2),pp.189-197.
- Davis D. (1989). ICT in learning: Technology Acceptance Model. Mil wall Inc. Ontario
- Dillon J,K. and Morris H. (2006). The Role, Status, and Working Conditions of Paraprofessionals: A National Survey of Academic Libraries. *College & Research Libraries*. 53, no. 3 (May 1992): 215–38;
- Evald, P. (12006). Information technology in public libraries. *Program 30: 2*, pp. 121-31.
- Fine, S. (2006). Technological innovation diffusion and resistance: An historical perspective. *Journal of Library Administration* 7 (1). 83-108.
- Fishbein, M., & Ajzen, I. (2005). Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research. Boston, MA: Addison-Wesley.
- Huang, H. M. & Liaw, S. S. (2005). Exploring user's attitudes and intentions toward the web as a survey tool. *Computers in Human Behavior*, 21(5), 729-743.
- Igberia, M. Johnson, B, & Chakrabarti, A. (2012). Computer anxiety and attitudes towards microcomputer use. *Behaviour and Information Technology* 9:3. pp. 229-241.
- Islam, M. S, and Islam, M. N. (2007). *Use of ICT in Libraries: An Emperical Study of Selected Libraries in Bangladesh*. Library Philosopy and Practice, available at http://todde.anadolu.edu.tr/tojde21/articles/islam.htm, accessed June 2010.

- Martins, E.O. (2011). ICT in modern library. *Journal of Nigerian Library Association*, Vol. 35 NO. 1, 15-22.
- Mathieson, C.K. (2011) Computer anxiety and attitudes towards microcomputer use. *Behaviour and Information Technology*. *9:3*. pp. 229-241.
- Omoniwa, M. A. (2001). The computerization of Kashim Ibrahim Library of Ahmadu Bello University, Naria, 1972-2001, Nigerian Libraries. *Journal of Nigerian Library Association*, Vol. 35 NO. 1, 15-22.
- Ramzan M. (2004) Does level of knowledge impact librarians' attitude toward Information Technology (IT) applications? *2nd International CALIBER* 2004, New Delhi, 11-13 February.
- Rovai, A. P. & Childress, M. D. (2002). Explaining and predicting resistance to computer anxiety reduction among teacher education students. *Journal of Research on Technology in Education*, 35(2), 226-235.
- Sadik K,L. (2006). Supporting Staff with new technologies in Twelve Ohio Academic Libraries. *College & Research Libraries* 54, no. 1 (Jan. 1993): 43–57;
- Shuva, N.Z. (2005). Implementing information and communication technology in public libraries in Bangladesh. *The International Information and Library Review*, 37,159-168.
- Spacey, R., Goulding, A., & Murray, I. (2013). ICT and change in UK public libraries: Does training matter? *Library Management.* 24:1&2, pp. 61-69.
- Taiwo I.O. (2008) Information technology in public libraries. *Program30: 2*, pp. 121-31.
- Tsitouridou, M. & Vryzas, K. (2003). Early childhood teachers' attitudes towards computer and information technology: The case of Greece. *Information Technology in Childhood Education Annual*, 1, 187-207
- Walmiki, R.H., & Ramakrishnegowda (2009). ICT Infrastructure in university libraries in Karnataka. *Annals of Library and Information Studies*, 56:.236-241.
- Yildirim, S. (2000). Effects of an educational computing course on pre-service and in-service teachers: A discussion and analysis of attitudes and use. *Journal of Research on Computing in Education*, 32(4), 479-495.