

Application of Information and Communication Technology (ICT) Facilities to Reference and Information Service Delivery in Selected Tertiary Institutions in Kano State

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Abstract

The study examined the application of information and communication technology (ICT) facilities to reference service delivery in some selected tertiary institutions in Kano state. The study employed qualitative research design using interview as a tool for data collection and it was conducted with the heads of reference section of the libraries under study. Four research objectives were formulated as thus: To identify the types of reference and information services provided in the institutions under study; to identify the type of ICT facilities used in provision of reference and information service in the institutions under study; to identify the various reference and information services provided using ICTs in the institutions under study, and to identify the challenges facing the library in using ICT facilities in the provision of reference and information services. The findings revealed that the reference sections of the libraries under study offer different types of reference and information services such as current awareness service (CAS), selective dissemination of information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, indexing service, abstracting services, referral services, printing services, Library orientation service, group presentation service (Slide display), Video display service, Reference digital desk service, E-mailing service, and up-loading service. The findings further showed that the libraries apply different ICT facilities such as computers, internet service, CD ROM, photocopiers, printers, GSM telephones, online databases, off-line databases, projectors, smart multimedia boards, radio, web blog, e-mail and Library in a flash to provide various reference and information services to users. The challenges revealed by the study are: electricity problems, cost of subscriptions to databases and slow network, among others.

Key words: Reference, Information Service, ICT Facilities, Library,

Introduction

Education is an instrument for development. It involves the development of individuals and the society at large. It is a process through which people are trained to

acquire knowledge and skills. Education and libraries cannot exist alone and functions effectively without one another. The academic work, intellectual strength and success of these educational institutions in producing high quality manpower into the

community depend largely on the quality of information resources available and the services provided in their libraries to support the teaching, learning and research activities. Library is one of the agencies responsible for dissemination of information to the public and drivers for national and international development.

For libraries to function effectively no doubt they must imbibe the use of information and communication technology facilities in their services (reference and information inclusive). Information and Communication Technology (ICT) has brought unprecedented changes and transformation to library and information services. Information and communication technologies (ICTs) is defined as a diverse set of technological tools and resources used to communicate and to create, disseminate, store, and manage information (Blurton, 1999). Advances in Information and Communication Technology have brought changes in the way the libraries acquire the resources, organize the resources and disseminate information to their users. Nowadays, libraries use various types of technologies to deliver their services to users, such as user services, technical services, and administrative services. As such, virtually all the services provided by the libraries are now being rendered with the aid of information and communication technology facilities.

Reference service involves the interaction between the reference librarians

and the clients in order to provide information needed by the users. Sultan (2012) identified the type of services offered by the reference librarians to include; question-answering service, search service/search help, bibliography service, and information and referral service identifying related web resources inside or outside. Libraries use information and communication technologies to search for information, to communicate and satisfy patron's reference and information needs. The academic library is the center of research, information and learning. Therefore, applying ICT facilities will enhance reference service delivery. It is in line with this Qutab (2014) maintained that libraries are in a state of transition in terms of resources and users in the past two decades due to the applications of information and communication technology. The libraries provide facilities for accessing various information resources for conducting research, retrieving information, exploring ideas, facilitating communication, and accessing resources available through the various ways. In the Information Communication technological world, providing reference services using these facilities is paramount in achieving educational sustainable development goals. Eke and Onyeacholam (2014) remarks that accessing information in traditional reference settings is not sufficient for the users to compete on the globalized level and also fail to live up to expectation. It is in this regard that this study is undertaking to ascertain the application of information and

communication technology facilities in reference and information service delivery in some selected tertiary institutions in Kano state.=

Research objectives

The study sought answers to the following questions

1. To identify the types of reference and information services provided in some selected tertiary institutions in Kano state.
2. To identify the type of ICT facilities used in provision of reference and information service delivery in some selected tertiary institutions in Kano state.
3. To identify the various reference and information services provided using ICTs in some selected tertiary institutions in Kano state.
4. To identify the challenges facing the libraries in using ICT facilities in the provision of reference and information services in some selected tertiary institutions in Kano state.

Research Questions

The study sought answers to the following questions

1. What types of reference and information services are provided in some selected tertiary institutions in Kano state?
2. What types of ICT facilities are used in the provision of reference and information services in some selected tertiary institutions in Kano state.
3. What are the various reference and information services provided using ICTs in some selected tertiary institutions in Kano state?
4. What are the challenges facing the libraries when utilizing ICT facilities in the provision of reference and information services.

Methods

The study employed qualitative research design using interview as a method of data collection. The design was appropriate for this study due to the number of participant involved in the study. Shuttleworth and Wilson (2008) maintained that qualitative research is often more practicable when sample sizes are small. If a large number of participants cannot be secured for a quantitative study, the few available participants can be better understood with in-depth interviews. It is in this regard that researcher adopted this design in this study.

Table1. Population of the study

S/N	Institutions	Number of Reference Librarians
1.	Yusuf Maitama Sule University, Kano.	3
2.	Kano State Polytechnic	2

3. Aminu Kano College of Islamic Legal Studies	1
4. Sa'adatu Rimi College of Education	1
5. College of Arts, Sciences and Remedial Studies, Kano	1
Total	8

Source: Field work, 2018

Table 1 shows the names of institutions, number of reference librarians in institutions under study.

Sampling Techniques

Purposive sampling was adopted for selecting the participants of the study. The selection of participants for this study was based on the strategy referred as purposive selection. Purposive selection denotes that a selection strategy in which particular

settings, persons or activities is selected deliberately. Thus, heads of reference sections of the libraries were considered appropriate subjects for the study. They were considered to be right participants to respond to the items contained in the interview questions.

Table2. Sample size of the study

S/N	Institutions	No of Reference Librarians	Code
1.	Yusuf Maitama Sule University, Kano.	1	P1
2.	Kano state Polytechnic	1	P2
3.	Aminu Kano College of Islamic Legal Studies	1	P3
4.	Sa'adatu Rimi College of Education	1	P4
5.	College of Arts, Sciences and Remedial Studies, Kano	1	P5
	Total	5	

Source: Field work, 2018

Table 2 shows the names of institutions, number of participants selected and the code given to each institution.

Data Collection Instrument

A semi-Structured interview was used as data collection instrument. Interview is one

of the most commonly recognized forms of qualitative research method. The interview format solicit

Procedure for data Collection

The researcher prepared the questions that guide him for the conduct of the interview and it was conducted with the Heads of reference section of the libraries in the selected tertiary institutions under study. The researcher makes use of audio recorder while interacting with the participants. The reason for audio recording was to be sensitive and thorough in capturing the interview.

Data Analysis Procedure

The researcher transcribed the data into textual form and organized it according to the research objectives. Coding system was used in analyzing the data which involves summarizing the central theme of data, categorizing it into concepts and built on the themes.

Themes that emerged from this study are:

Theme1: Types of reference and information services offers in the libraries under study

Theme 2: ICT facilities available in reference sections of the libraries under study

Theme 3: Types of reference and information services provided using the ICT facilities

Theme 4: Challenges encountered in using the ICTs

Theme1: The types of reference and information services offer in the libraries under study

Responses:

P1: Reported that the types of reference and information services provided for the users in their library are; Current Awareness Service (CAS), Selective Dissemination of Information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, indexing service, abstracting services, referral services, printing services, library orientation service, group presentation service (Slide display), video display service, reference digital desk service, e-mailing service, and up-loading service.

P2: Revealed that the reference services they offers are Current Awareness Service (CAS), Selective Dissemination of Information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, referral services, printing services, library orientation service, up-loading services.

P3: Stated that the reference services they offer are Current Awareness Service (CAS), Selective Dissemination of Information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, referral services, printing services, Library orientation service.

P4: Stated that the reference services they offer are Current Awareness Service (CAS), literature searching service, photocopying service, display of new arrival service, user education service, referral services, printing services, library orientation service.

P5: Reported that the reference services they offer are Current Awareness Service (CAS), Selective Dissemination of Information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, referral services, library orientation service.

Analysis

The data presented above indicated the various types of reference and information services that are available by the institutional libraries. The data revealed that there are different types of reference services the libraries offer to their users. It is clear that all the libraries have common services which include Current Awareness Service (CAS), Selective Dissemination of Information Service (SDI), literature searching service, Photocopying service, display of new arrival service, user education service, Referral services, printing services, Library orientation service. The data revealed that P1 offers more services than others such as Abstracting services, and Indexing services. It is not surprising to have all these resources put in place for reference services as Ifijeh & Isiakpona (2014) states that "Reference services cover a wider range of activities than merely answering reference and information service enquiries." Despite also having all these resources available does not mean that the library covers all reference and information services the users required there are some certain reference services that might not be offered in their services as Gama (2013) observed that "It is a fact that no library is self sufficient. Users may sometimes require

some resources or services that are not available with their libraries."

Theme 2: ICT facilities available in reference sections of the libraries under study

Responses:

P1: Reported that they have computers, internet service, CD ROM, photocopiers, printers, GSM telephones, online databases, off-line databases, projectors, Smart Board, radio, web blog, e-mail and library in a flash.

P2: Stated that they have computers, internet service, CD ROM, photocopiers, printers, GSM telephones, projectors,

P3: disclosed that they have computers, internet service, CD ROM, photocopiers, printers, GSM telephones, projectors, OPAC

P4: Reported that they have computers, internet service, CD ROM, photocopiers, printers, GSM telephones, online databases, off-line databases (KOHA, and Maktaba Al-shamila), projectors, OPAC

P5: Revealed that they have computers, CD ROM, photocopiers (not functional), printers (not functional), GSM telephones,

Analysis

The report reveals that the all the libraries under study have almost similar information and communication technology facilities they adopt in rendering reference and information service delivery in their respective libraries ranging from computers,

internet service, CD ROM, photocopiers, printers, GSM telephones. These resources facilitate access to information to diverse library users at a time and lend a hand in making Sustainable Development Goals a reality. The report tallies with that of Gama (2013) which he found that variety of ICTs such as computer, internet, CDROM among others are used in reference and information service provision in university libraries in Northwest zone of Nigeria. It also supported that of Ukachi (2008) which revealed that the ICT facilities in the form of computers, printers, Internet services

and CD-ROM are being used in the reference service in academic library. Added to the facilities that are not common among the report of P2, P3, P4, and P5 but are present in P1 are online databases, off-line databases, Smart Board and library in a flash which are also important tools in reference service delivery. Therefore, having all these reference and information technology facilities in P1 is not surprising as it can be attributed to the fact that it is a newly established university that came in the era of information communication and technologies.

Theme 3: Types of reference and information services provided using the ICT facilities

Responses

P1 Maintained that they use these ICT facilities for the following reference and services:

Computers:

- ✓ Indexing service
- ✓ Communication via social media
- ✓ Word processing

Internet service:

- ✓ Literature searching
- ✓ Communication with the aid of computer

CD ROM:

- ✓ Up-loading
- ✓ Lending services

Photocopiers:

- ✓ Photocopying services

Printers:

- ✓ Printing services

GSM telephones:

- ✓ Answering simple reference questions
- ✓ Referral services

Online databases:

- ✓ Literature searching

Off-line databases: Literature searching

Projectors:

- ✓ Library orientation service

Smart Board:

- ✓ Presentation (Slide display)
- ✓ Video display

Web blog:

- ✓ Sending and retrieving messages
- ✓ Show casing the activities of the library
- ✓ Reference digital desk service

E-mail:

- ✓ E-mailing messages to library users (eg new arrivals)
- ✓ Referral services

P2: Confirmed that they use these ICT facilities for reference services but with some few variations:

Computers:

- ✓ Communication via social media
- ✓ Word processing

Internet service:

- ✓ Literature searching
- ✓ Communication with the aid of computer

CD ROM:

- ✓ Up-loading
- ✓ Lending services

Photocopiers:

- ✓ Photocopying services

Printers:

- ✓ Printing services

GSM telephones:

- ✓ Answering simple reference questions
- ✓ Referral services

Projectors:

- ✓ Library orientation service
- ✓ Sending and retrieving messages
- ✓ Show casing the activities of the library
- ✓ Reference digital desk service
- ✓ Referral services

P3: Also claimed that they use these ICT facilities for the following reference and services:

Computers:

- ✓ Communication via social media
- ✓ Word processing

Internet service:

- ✓ Literature searching
- ✓ Communication with the aid of computer

CD ROM:

- ✓ Up-loading
- ✓ Lending services

Photocopiers:

- ✓ Photocopying services

Printers:

- ✓ Printing services

GSM telephones:

- ✓ Answering simple reference questions
- ✓ Referral services

Projectors:

- ✓ Library orientation service

P4: Reported that they use these ICT facilities for the following reference and services:

Computers:

- ✓ Communication via social media
- ✓ Word processing

Internet service:

- ✓ Literature searching
- ✓ Communication with the aid of computer

CD ROM:

- ✓ Up-loading
- ✓ Lending services

Photocopiers:

- ✓ Photocopying services

Printers:

- ✓ Printing services

GSM telephones:

- ✓ Answering simple reference questions
- ✓ Referral services

Online databases:

- ✓ Literature searching

Off-line databases: Literature searching

Projectors:

- ✓ Library orientation service

E-mail:

- ✓ E-mailing messages to library users (eg new arrivals)
- ✓ Referral services

P5: Revealed that they use these ICT facilities for the following reference and services:

Computers:

- ✓ Communication via social media
- ✓ Word processing

CD ROM:

- ✓ Up-loading
- ✓ Lending services

GSM telephones:

- ✓ Answering simple reference questions
- ✓ Referral services

Analysis

The participants stated that, all the ICT facilities available are being utilized in one form of reference services or the others in providing access to information. They stated that they use computer for word processing, receiving and sending messages

with the aid of internet connection and also make book indexing service using Microsoft. Furthermore, they also reported that they use internet to provide different internet literature searching strategies to library users and also for communication. The CD ROM is also another reference and information services the library offer

through uploading and charging in and charging out of CD ROM to users. The finding contradict that of Ukachi(2008) which found that users were not allowed to download information to storage device like diskette, flash and CD ROM. Moreover, Issa et al (2011) in their study on Application of Information and Communication Technology to library services at Federal University of Technology Akure, revealed that there is a user code of conduct that is posted at the entrance of the section that CD ROM, Diskettes, flash drive and other storage devices are not allowed.

Moreover, the report reveals overwhelmingly that they rendered photocopying and printing services in the provision of reference service delivery in their libraries as well as using projector for presentation during orientation. Also, the report of P1 depicts that both online and offline databases are used in the provision of literature searching service. They provide multimedia reference service using Smart Board for video display and slide presentation. This is in conformity with Rarnaiah (1998) who lamented that most of the libraries are using multimedia resources for reference service and instructional purpose. The finding also reveals that reference digital desk service is rendered using web blog.

Theme 4: Challenges encountered in using the ICTs

Responses:

P1: Reported that the library in their attempt to deliver these services encountered the following problems:

- i. The university has generator that provides electricity to the entire campus and university library in particular has inverter, despite these efforts at times the reference services are affected with problems of electricity.
- ii. Fluctuating and slow network is another problem that at times hinders reference service provision.
- iii. Subscriptions to databases are very costly, therefore not everything on the databases is subscribed but selected and leave others that may also be beneficial to the university community.
- iv. Not all their system recognized CD ROM.
- v. When using digital reference desk, a times users use wrong e-mail address and the messages intended to deliver will be missed.

The following challenges were identified by participant:

P2:

- i. Problems of electricity
- ii. Slow internet network
- iii. Lack of inverter

P3:

- i. Lack of standard power supply.

- ii. Slow internet network
- iii. Lack of inverter

P4:

- i. Lack of subscription to internet service in time when expired
- ii. Fluctuating of network
- iii. Problems of power supply
- iv. Inverters are not working

P5:

- i. There is no internet service provision in the library
- ii. There is no single functional computer in the library
- iii. Problems of power supply

Summary of findings:

1. That the reference sections of the libraries under study offer different types of reference and information services such as current awareness service (CAS), selective dissemination of information Service (SDI), literature searching service, photocopying service, display of new arrival service, user education service, indexing service, abstracting services, referral services, printing services, Library orientation service, group presentation service (Slide display), Video display service, Reference digital desk service, E-mailing service, and up-loading service.
2. That the ICT facilities used in the provision of reference and information services in the library under study are computers, internet

service, CD ROM, photocopiers, printers, GSM telephones, online databases, off-line databases, projectors, smart multimedia boards, radio, web blog, e-mail and library in a flash.

3. That the reference and information services provided using ICT facilities in the libraries under study are library orientation, referral services, printing services, photocopying services, e-mailing services, video display service, slide presentation services and internet literature searching services.
4. That the reference and information service provision in the libraries under study encountered some challenges of irregular electricity supply, cost of subscriptions to databases and slow network, among others.

Conclusion

The libraries in selected tertiary institutions in Kano state use different types of information and communication technology facilities for reference and information service delivery, particularly computers, internet service, CD ROM, photocopiers, printers, GSM telephones among others. The conclusion the researcher arrived at in this study is that, the ICT facilities available and the services provided by the reference section of the libraries under study could be referred as satisfactory, despite the fact that there are some ICT facilities

that are not available in the libraries of some institutions under study.

Recommendations

- ✓ There is need to maintain the reference and information services being provided in the libraries and even adds more on that so that users' information needs could be effectively satisfied.
- ✓ There is need to acquire some other ICT facilities such as facsimile (Fax) as it is paramount for its inclusion in the library because it has proved itself to be one of the fastest methods of transmitting information, so also they should adopt the use of OPAC as they will accelerate access to information. User education should also be conducted from time to time to avoid misusing the resources

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especially Smart Multimedia Board using reference digital desk as the report revealed some users wrongly use their e-mail address.

- ✓ The libraries should ensure that appropriate funds are budgeted to cater for the challenges of irregular electricity supply, cost of subscriptions to databases and slow networking. There is need for the libraries to acquire high powered generator that will provide power to the inverter in case of power outage or when the main institutions switch off their generator, so that the reference service provision will not be hampered.

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