

## **AVAILABILITY AND USE OF ICT IN KENNETH DIKE STATE CENTRAL E-LIBRARY, AWKA, ANAMBRA STATE, NIGERIA.**

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### **Abstract**

*This study is on the availability and use of Information and Communication Technology, (ICT), by users in Professor Kenneth Dike State Central E-Library, Awka. The design adopted for the research is descriptive survey. The population of the study was 500 registered users. A sample size of 90 respondents gotten through accidental sampling was used. Two research questions were formulated to guide the study. Data were collected using structured questionnaire. Collected data were analyzed using frequency counts and percentages. The findings indicated that available ICT facilities were monitors, cable/Internet connection, printers, photocopiers and scanners. It was also found out that users' ability to make use of ICT facilities was high on sending e-mails and scanning images to the computer. Among others, the study recommends that efforts should be made by the library management to provide ICT facilities and improve the services are offered by the library via ICT facilities.*

**Key words:** Analogue and digital librarian, ICT Availability and Use, Kenneth Dike e-Library and Public library

### **Introduction**

One fundamental aspect of globalization is the emergence of Information and Communication Technology (ICT) and its application in many facets of life. The world summit on the information society (WSIS 2003) held in Geneva in 2003 reaffirmed on a global level the need for digital literacy skills in the twenty-first century. It emphasized that ICT literacy policy will help to ensure that students and employers are ready for the work force of the twenty-first century where digital literacy will be critical to the ability of nations to compete successfully in global information and knowledge economy. Governments were therefore, encouraged to make necessary adjustments in their national information communication infrastructure policy to facilitate the provision of ICT facilities and encouragement of ICT literacy.

The introduction of ICT in librarianship necessitates retooling and acquisition of skills required to operate in the global information society. The capacity of users to exploit the ICT depends on the level of literacy, education and mastery of the technologies. Reflecting on this Menuo (2002) noted that the situation on ground requires retooling of information professionals as the potential of the information age cannot be realized without expanding the scope of information and computer literacy. He further reiterated that: people should be sensitized to be able to use basic applications such as word processing, spreadsheet, and electronic mail and possibly more advanced applications such as presentations, production of web pages, construction of websites, use of digital multimedia equipment and programs.

In the light of the forgoing, it is often argued that ICT is the convergence between the computer and communication technologies and as such, it becomes the technologies used to communicate and to create, manage and distribute information. Information and Communication Technologies includes computers, the internet, telephone, television, radio and audio visual equipment. However, this definition has been expanded to include any device and application used to access, manage, integrate, evaluate, create and communicate information and knowledge. The devices include but not limited to radio, television, cellular phones, computer hardware and software, network hardware and software, satellite systems, peripherals, connections to the internet, digital technologies and others. Also considered in the ICT are the services and applications used for communication and information processing functions associated with these devices.

ICT changes the way we live, learn, and work. As a result of these changes, technology tools and creative application of technology have the capacity to increase the quality of people's lives by improving the effectiveness of technology teaching and learning, the productivity of industry and government and the well-being of nations. Fundamentally, an ICT literacy skill generally is the familiarity with mobile phones, computers, the internet and other ICTs; the ability to use ICT features and application and the ability to use ICTs to work individually or in teams. In fact, it involves the awareness of technology and applications of their relevance, use of technology for information and knowledge encompassing skills or abilities to access, retrieve, store, manage, integrate, evaluate, create and communicate information and knowledge and participate in networks via the internet and understanding that ICT acquisition and use impacts on personal and social development.

The key role of library is to provide structured access to information with the increasing reliance on ICT. Libraries are playing significant roles in implementing and moderating a country's information society agenda. Library is the focal point of learning and research activities in academic institutions due to its information acquisition, organisation, storage, retrieval and dissemination functions to the community. Librarians are at the threshold of these activities and are now faced with the emergence of information technology in the scene of information exchange. This brought new tools and techniques of acquiring and handling information. To effectively serve the academic community in the ICT environment; the librarians need to move along with the new development. Librarians are those who have the care of library and its content; the work includes selection of stock, its arrangement and exploitation in the widest sense, and the provision

of a range of services in the best interest of all groups of users (Prytherch, 1995). They are also involved in the coordination of activities, setting of priorities, evaluation and other managerial tasks and their involvement in the community they serve.

Apart from using the new tool to fulfill the traditional roles of the library, it evolved some new practices in the profession. Some of the new developments include digital environment for information acquisition, processing and dissemination. Information is now mostly in electronic format. Library services are also affected by the format. Oppenheim and Smithson (1999) described digital library as an information service in which all the information resources are available in computer processable form. This requires new managerial skills for the administration of the new environment (digital library). Therefore, the new era librarians that can operate in the digital or ICT environment are indispensable. Librarians are compelled to be content creators of information, web page planners and designers and internet navigators. As a result of the digital technology inroad into the profession, such nomenclatures as internet librarians, digital librarians, Cyberians or Weberians are attributed to the emerging librarians. These are librarians that have acquired the new literacy skills in the manipulation of the ICT tool for information service delivery to clientele.

Technology is changing rapidly and continuously, and learning to deal with it, requires not just one of mastery of process but also adaptability. ICT literacy evolved as a result of the technological changes brought about by the appearance of the information society and the advances made by the technological world. To be digital is to be acquainted/literate or skilled with the storage, retrieval, manipulation and transmission of information electronically. Analogue is alphabetic representation of graphics or characters. It simply means information in textual forms. An information literate librarian who applies his literacy in the acquisition, organization, retrieval and dissemination of information in textual form is called an analogue librarian. Digital librarian is one who applies digital literacy skills in his professional role as a librarian.

Gbaje (2007) also noted that the deregulation of the telecommunication industry and implementation of the information technology policies by the Federal Government of Nigeria has resulted in the proliferation of internet cafes, giving birth to generation of internet-loving library patrons who regard the internet as a primary source of information. He also emphasized that these online patrons are overwhelmed by information overload on the internet and are crying for help to find reliable and accurate information quickly. To achieve this, librarians are expected to be computer literate, information navigators through the superhighways, creators of innovative information systems for the collection, organization, dissemination and preservation of information and new knowledge regardless of format and designing and maintaining a library website as a platform for delivering online services.

However, there is a digital divide between the developed and the developing world of which Nigeria is one. The digitally rich countries have high ICT literacy skills because of the availability of sufficient ICT infrastructure and usage while the digitally poor countries in comparison to the advanced countries, have a yawning gap between them in the digital atmosphere called –digital divide. There is need to bridge this gap for efficiency in globalization age. To facilitate this, there is need to examine ICT status of public libraries.

As a matter of fact, the use of ICT in the achievement of desired goals in workplace is increasingly related to the ICT literacy possessed. This affects the proficiency of the ICT use and efficiency of job performance.

The general purpose of the study is to determine the availability and usage of ICT facilities in Professor Kenneth Dike State Central e-Library, Awka. Specific objectives of the study are to ascertain (a) the ICT facilities available to users in Professor Kenneth Dike State Central e-Library Awka; and (b) determine the extent of ICT usage by users in Kenneth Dike State Central e-Library, Awka. Against this backdrop, the study focuses on the availability and use of information and Communication Technology by users of Kenneth Dike State Central e-Library Awka (2016-2018). The reason for this is to ascertain the ICT compliance and effective usage by the users in Professor Kenneth Dike State Central e-Library Awka. As pointed in Biereenu-Nnabugwu (2019) research questions are essentially interrogative statements that proceed from the statement of research problem / objectives of the study. Accordingly, arising from the objectives, this study is guided by two research questions: **(a)** What are the ICT facilities available to users of Professor Kenneth Dike State Central e-Library, Awka? **(b)** To what extent do users make use of ICT facilities in Professor Kenneth Dike State Central e-Library Awka?

### **Review of Related Literature**

Many researchers have defined Information and Communication Technology (ICT) from different perspectives. Etebu (2010) defined ICT as a by-product of the digitalization era, it is a tool for processing, storage and retrieval of information in coded form, and its transportation and exchange between sources and terminals electronically. Omekwu (2008) referred to the ICT as a change agent that have facilitated the advancement of the use of communication satellite, cable television networks, wireless telephones systems, computer network systems and the internet on all professions. Rodriguez and Wilson (2000) also defined ICT as the application of internet and network facilities to enhance the communication and retrieval of information over a distance. For Qiang (2003), ICT is the technologies that enable the handling of information which in turn facilitates the different forms of communication between man and the electronic system such as the radio, television, cellular phone, computer networks and satellite systems.

On his part, Eke (2006) described ICT as the type of technology that links the computer to the global telecommunication network to make it possible for users to acquire, process, compute, store and disseminate oral, printed and pictorial information. Thioune (2003) defined ICT as the possibilities offered by the convergence of data processing technologies, electronic data, media and telecommunication, convergence that have become more manifest over the years. He further categorized ICT into groups; traditional and new ICTs. Traditional ICT includes radio, television, fixed line telephone and facsimile machine which have been in existence for some time. The new ICTs are the modern computer and data applications, acceptable through computers such as E-mails, internet, CD-ROM etc. From the foregoing insights, it can be inferred that ICT is any tool or gadgets that facilitates the functions of storage and dissemination of information through a medium. Thus, ICT is contextualized as the medium through which information is made accessible through network connections. The advancement of ICT facilities has enhanced the provision of

scientific research and discovery and as well limited the barriers of time, space, distance and language.

On ICT facilities in libraries, many writers attest that the availability of information and communication technology (ICT) facilities in libraries is strategic to the achievement of timely and efficient library services. Thus, while studying ICT facilities available in libraries, Etebu (2010) outlined the following: computers, UPS, VSAT, LAN, WAN, e-mail, CD-ROMs, Audio-Visual accessories, internet and its ancillary service, mobile phone, telephone, scanners radios, etc. Chauhan (2011) outlined the following as ICT facilities mostly available in libraries: computers, digital camera, webcam, smart card, e-books, e-journals, web-OPAC, CD-ROM, etc. He stated that the CD-ROMs, coming along with books are assigned accession numbers and kept at the computer section to be issued to the users to get information whenever needed. Libraries mainly subscribe to CD-ROMs, database, but to also have access to wide collections of materials from other sources for the benefit of their users. He further stated that networked access to database helps in getting newly published information to library users; while, the technology of reprography has a big impact on the document development system as most libraries have reprographic machines which they use to provide photocopy services for users on any document(s) on demand.

Oduwole & Akpati (2003) identified the following as ICT facilities available and provided by Nigerian libraries: Online Public Access Catalogue, CD-ROM databases, electronic mail (e-mail) and internet browsing. In a survey on cyber cafe established in the e-library environment to aid learning and research in Delta state, Edem (2005) reported that 77.8% of the users were students. Ojedokun and Owolabi (2003) reported that e-mail is the most available internet resources for any ICT user. All of these point to the fact that ICT facilities are usually available at some point for e-library to use for service delivery

ICT was introduced to perform library functions and provide innovative user services. On this, Oliver and Tower (2000) viewed ICT literacy as the set of skills and understandings required by people to enable meaningful use of ICT appropriate to their needs. In their settings, the ICT literacy of a statement is a relative measure of the student's capacity to make appropriate use of ICT for educational and learning purposes. Likewise, the ICT literacy for librarians is relative measures of the librarian's capacity to make appropriate use of ICT information acquisition, organization, retrieval and dissemination as information professionals. This involves the level of skills needed by librarians to use computer for their work and to independently function in a web-based, on-line learning environment. They also pointed out that skill/ competencies still remains the underpinning element of computer and ICT literacy and measures the extent and scope of ICT application and uptake among different computer users. Four distinct areas of skills and expertise such as an ability to independently operate personal computer system, an ability to use software for preparing and presenting work, an ability to use internet and its various features as communication devices, and an ability to access and use information from world wide web (www) were seen as attributes of an ICT literate individual. In their study on the availability and utilization of ICT facilities Apagu and Wakili (2015) found out that ICT facilities were lacking in technical colleges in Yobe state and that teachers and students' exposure to ICT facilities was low. On her part, Nwachukwu (2018) found that lack

of sufficient computer desktops, poor electricity supply, inability of teachers to operate ICT facilities and inadequate facilities maintenance are some the critical factors that affect the availability and utilization of ICT Facilities in the teaching and learning of Social Studies in Awgu LGA of Enugu State.

With regards to the extent of use of ICT facilities in libraries, it is observed that usually, e-libraries are not a face-to-face interaction in rendering services to clientele except for analogue telephone calls. Martell (2003) posits that the extent at which today's ICT in library advanced institution are used and provided can be on-line or off-line. Ani, Esin and Edem (2005) listed the following as the Information and Communication Technologies used in libraries to service its users: web forms, ask a librarian; chat with a reference librarian, contact centre; video conference; voice over internet protocol (VOIP) and SMS reference service etc. The extent to which these ICT tools are used depends on their availability in the libraries.

In analysing the extent of use of ICT in e-libraries, Mole (2006) reports that about 46.9% of academic institutions in United State use web-based interactive reference as an extension of their traditional reference services. He went further to show that although these services are more feasible and operational in more technologically developed nations, developing countries too can use recent digital library development, digital information services, free access to e-journals and e-books, e-print archives etc., to bridge the gap. With the emergence of the internet, university libraries in developing world can also start creating organized map to selected resources on the internet. These maps link the searcher to set of finite sites of respectable quality organized recognizable theme (Martell, 2003). With the creation of such path ways, users can navigate the internet to sources for required information and by so doing, it reduces the traditional method of reference services offered by university libraries.

In addition, ICT tool used in libraries is the Online Public Access Catalogue (OPAC). The OPAC according to Ajibero (2001) is a detailed holding of a particular library or group of libraries or a database to which users have access. Therefore, with the evolution of OPAC which is networked and universally accessible, it is possible to access the university library's collection without pulling the drawers of three by five cards (Butterfield, 2003). E-libraries provide inter-library loan (ILL) and document delivery services to assists users access information that may not be available on their shelves. With the use of ICT, inter-library loan services are done through electronic networks. These networks are established as means of sharing common resources among several users (Okore, 2005).

Online information services are anticipatory or responsive. Some of the online information services provided include the scanning of newspaper clippings, abstracting/indexing services, current awareness services, translation services etc. Newspaper clipping and scanning services constitute an important source of information as they contain the latest information in the form of news with often daily updating. The on-line reservation service, allows students to reserve books and journals which are on order, being processed by the library or on loan to another reader. Users can place reservation at the issues or information support desk using the request option on the on-line catalogue. Data searching services is used by the e-library to regularly provide the users with the exact information they need depending on their interest profiles. Audio

Visual services are important sources of information and are usually in DVD, films, pictures, photograph etc. which students can use for their research needs. The use of the Internet is very beneficial, because of this some libraries provide free or controlled access to Internet; E-Query services, this is web-enabled contemporary reference service offered to the registered members of the library to send their queries to the library via e-mail.

Some studies have also been carried out on information literacy among librarians. The most outstanding ones are that of Adeyoyin (2005) on ICT literacy among librarians in Nigerian universities and the one in India by Babu, Vinayagamorthy and Gopalakrishnan (2007) on ICT literacy among engineering faculty. As a matter of fact, there is increasing developmental shift from analogue to digital librarianship. For Febeyeinde (2006), ICT is the fusion of information technology with that of communication while ICT literacy according to an international independent panel of experts convened by Educational Testing Services (ETS) in 2001 is using digital technology, communication tools and/or networks to access, manage, integrate, evaluate, and create information in order to function in the knowledge society.

It is obvious that all these point to the level of ICT literacy without determining the effect of ICT facilities availability and ICT literacy acquisition on its application for utilization in their professional day-to-day activities. Tomero (2004) emphasized that the integration of ICT into the society is demanding complex and sophisticated changes in the way people think and act. This shows that the introduction of ICT to the knowledge and information society necessitates ICT literacy. To move along with the current trend in the information world, digital literacy (ICT literacy) is not only indispensable, but also need to be studied so as to ascertain availability and use by library users.

In summary, this review of literature on the availability and use of Information and Communication Technology (ICT) in Kenneth Dike State Central e-library, Awka; conceptualized ICT and ICT facilities available in libraries. It also focused on the extent of use of ICT in libraries. It showed that availability and use of ICT in public libraries can promote quick and timely access to resources, eliminate distance as well as provide access to information resources, provide a wide choice of information resources within the e-library and other distance libraries linked with the Internet. ICT facilities also create room and avenue for peer review with users from distance places, improve the efficiency and quality of services offered to users by the e-library; efficiency of information exchange between users, librarians and researchers of all categories. Gap in knowledge in the study revolves around the fact that within the context of the immediate environment, there is dearth of scholarly literature on the availability and extent of use of ICT facilities in public libraries, Kenneth Dike E- Library in particular. Most literature were based on academic libraries and could not depict the actual case in the public library setting, hence, the need for the study. As a matter of fact, there is currently lack of studies on the availability and use of ICT in public libraries within the milieu of Anambra State. The study is accordingly anchored on the need to fill empirical gap in knowledge concerning availability and use of Information and Communication Technology (ICT) by users in Professor Kenneth Dike State Central e-Library, Awka, Anambra State.

### Method of Research

The study adopted survey research design. The total population of the study is five hundred (500) registered users of the e-library section of Professor Kenneth Dike State Central e-Library. A sample size of 90 users was generated through accidental sampling technique was used for the study. Accidental sampling techniques does not make pretensions about representativeness (Biereenu-Nnabugwu, 2006); and because it entailed sampling from everyone and anyone that the researcher happens to encounter in a place or between certain times (McQueen and Knussen, 1975), the researchers deemed it suitable for the study. Membership of the sample was therefore coincidental.

The instrument for data collection was a structured questionnaire. The questionnaire was divided into three (3) sections (A, B and C). Section (A) was designed to collect personal data. Section (B) was designed to collect information on availability of ICT facilities in Professor Kenneth Dike State central e-Library, Awka. Section (C) was designed to collect data on the extent of ICT usage in the library. The questionnaire was administered by the researchers. A total of 120 copies of the questionnaire were distributed in Professor Kenneth Dike e-Library section, out of which only 90 were valid. Frequency counts and percentages were methods used for data analysis.

### Presentation and Analysis of Data

Presentation of data is based on research questions

*Research Question 1:* What are the ICT facilities available to users of Professor Kenneth Dike State Central e-Library, Awka?

**Table 1:** ICT FACILITIES AVAILABLE TO THE E-LIBRARY USERS OF PROF. KENNETH DIKE STATE CENTRAL E-LIBRARY.

| S/N   | Facilities                | Frequency | Percentage |
|-------|---------------------------|-----------|------------|
| 1     | Monitors                  | 22        | 24%        |
| 2     | Cable/internet connection | 18        | 20%        |
| 3     | Printers                  | 23        | 26%        |
| 4     | Photocopying machine      | 10        | 11%        |
| 5     | Scanners                  | 17        | 19%        |
| Total |                           | 90        | 100        |

Table 1 above shows that the respondents agreed to the availability of Monitors, Cable/Internet connection, printers, photocopy machines, scanners with the percentage rating of 24%, 20%, 26%, 11%, and 19% respectively.



*Research Question 2:* To what extent do users make use of ICT facilities in Professor Kenneth Dike state central e-Library, Awka?

**Table 2:** PERCENTAGE SCORE OF RESPONSES ON THE USER'S ABILITY TO MAKE USE OF THE ICT FACILITIES IN KENNETH DIKE STATE CENTRAL E-LIBRARY.

| S/N   | User Ability                                | Frequency | Percentage |
|-------|---|-----------|------------|
| 1     | Ability to send email                       | 23        | 30%        |
| 2     | Ability to attach files                     | 8         | 9%         |
| 3     | Ability to track, delivery and read email   | 13        | 12%        |
| 4     | Ability to scan and save images             | 19        | 20%        |
| 5     | Ability to access the e-journal             | 16        | 15%        |
| 6     | Ability of accessing online resources       | 4         | 6%         |
| 7     | Ability to access the e-references services | 7         | 8%         |
| Total |   | 90        | 100%       |

Table 2 above shows that the respondent has a high ability of sending e-mails, attach file, track and read mails and scan images with the percentage rating of 30%, 20%, 15%, 12%, respectively. Most respondents have the ability to send e-mail with the percentage of 30%.

*Summary of Findings.* The finding of this study are two. The first is that Information and Communication Technology (ICT) facilities available in the library under study include monitors, cable/ internet connection, printers, photocopying machine and scanners. Secondly, users' ability to make use of the ICT facilities to send e-mails, attach file and scanned images from the computer was high. On the other hand, respondents have less ability to track and deliver e-mails.

### Discussion of Findings

On ICT facilities availability to users of the e-Library, the study revealed that ICT facilities such as monitors, cable/Internet connection, printers, photocopying machines and scanners were available. This finding counters the position of Apagu and Waikili (2015) who found that ICT facilities were lacking in the technical colleges in Yobe state. Curiously, Nwachukwu (2018), on her part, found that lack of sufficient computer desktops, poor electricity supply, inability of teachers to operate ICT facilities and inadequate facilities maintenance are some the critical factors that affect the availability and utilization of ICT facilities in the teaching and learning of Social Studies in Awgu LGA of Enugu State.

Interestingly, the study is in tune with Dhiman and Sharma (2009) who observed that the integration of ICT into library services is important because it reinforces and reiterates the basic values and beliefs of the profession in the changing environment. This point was also emphasized by Sommers and Barnes (2001), who, stated that ICT facilities is essential to achieving the performance objectives while at the same time meeting users' needs. Several users no longer see the library as an avenue where current and relevant information can be sourced. In order to change this perception, librarians need to educate

the users on the benefits of e-library usage which includes having access to good, current and relevant information sources to solve their problems. It is in line with this that Olanlokun and Zaid (2006) stated that it is very vital that library stakeholders understand that the absence of ICT e-library services would be catastrophic to community in a practical and symbolic way.

With regards to the extent of ICT usage by users of Professor Kenneth Dike State Central e-Library; it was discovered from the results of research question two that the respondents had ability to send e-mails, attach files and scan documents, an indication of hybrid library services. The hybrid services provide online and offline e-Library services for accessing catalogue, databases, accessing the e-journals and accessing online resources. This agrees with Aina (2004) who argued that hybrid services which provide online and offline e-Library services for accessing catalogue, databases, and internet will attract users to the library.

*Implication of the Study.* The findings of this study have far-reaching implications for the library profession and the library management. The library profession must realize that change is inevitable. In order to compete favourably with various information providers, the library profession should adapt and embrace change, especially in ICT. Librarians and library management must realize that the main issue in librarianship is about speedy accessibility and retrieval of information by users. Therefore, librarians should provide qualitative services and plan for new services to be provided to users. Services provided to users should be responsive to users' information needs.

Librarians must realize that no man is an island and no library can satisfy all the needs of its users, therefore librarians must form consortiums where knowledge and information resources can be shared among them. With the advent of Information and Communication Technology (ICT) the role and position of libraries have rapidly changed from custodians of information to providers of information. The library should shift from traditional way of serving users and emphasis should be placed on the provision of online access to information resources and services. Libraries should work towards improving their ICTS such as internet, software and hardware and accessing the internet with easy.

### **Recommendations**

Based on the findings, the following recommendations are made: (1) The government should allocate more funds for the provision of ICT facilities in the library under study. (2) The library management should expose e-library users to ICT facilities through trainings, conferences, seminars, workshops, and symposiums. (3) Facilities that are needed for effective e-library services should be provided to the library, such as modem, monitors, Internet connections, etc. (4) Librarians should be more committed to their work, and also able to introduce new techniques. (5) Efforts should be made by the library management to improve the services offered by the library.

### **Conclusions**

Based on the findings of the study, it was concluded that ICT facilities such as monitors, cable/Internet connection, printers, photocopying machines and scanners were available

in the library and that users' ability to use e-mail services was high. Hence, effort should be made to enable users become competent in using available ICT facilities.

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