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The Internet as an Enabler for Information and Resource Sharing in Libraries

Godwin Nwachukwu Arua, CLN
egonwa4tochi@gmail.com
Chief Librarian,
Public Services Department
College Library, Federal College
of Education, Eha-Amufu

Edwin, Ifeanyi Ogbo, CLN
eziafa2015@gmail.com
Deputy College Librarian,
Technical Services Department
College Library, Federal College
of Education, Eha-Amufu

Chinenye Patience Nwebiem
chinenyenwebiem@gmail.com
Principal librarian, Reference
Services Department
College Library, Federal College
of Education, Eha-Amufu

Abstract

Access to information is a fundamental right to all citizens and information seeks in particular. We live in a time where the level of utilization of information has become the yardstick to determine a country's economic strength and advancement. No library can effectively satisfy the information needs of its patrons from available resources in its collections. Hence, libraries have to resort to resource sharing. Resource sharing in this digital era comprise of the interaction by which a library makes its resources available to the patrons of other libraries upon request. The advent of the Internet has enabled libraries to practice resource sharing effectively especially with functional digital library. The major advantage with the Internet stems from willingness to share information with others so that everyone can benefit. In the modern world of information explosion, the Internet has become a gateway for libraries and information centres to enter into the electronic information era and provide information generated by different organizations, institutions, research centres and individuals globally. No one can think of providing effective modern library service without Internet facilities. This treatise is an opinion paper, which tries to explore the concepts of resource sharing, Internet and how the Internet has affected, influenced and impacted on operations of library and information services as the topmost among sharable utilities to libraries and librarians, scholars, researchers and all those who may require any information.

Keywords: Resource sharing, Internet, Network, Library, Information services.

1.1 Introduction

Information and Communication Technology (ICT) is transforming the entire world into an important force to be reckoned with and the activities are undertaking a centre stage in all spheres of human endeavours, including libraries. Information is a vital element for any type of development. The

emergence of information and communication technology has repositioned libraries and has shifted the expectation of library user groups. Rapid changes in the field of ICT, data generation and infrastructure supporting data generation over the years have greatly impacted the various phases of research life cycle. Bradbury and Borchert

(2010) observed that many researchers are enthusiastic about using new technologies, and giving the opportunity, they are willing to take advantage of collaborative online infrastructure, tools and services to improve the outcome of their researches.

No library in the world, regardless of its size can boast of being self-sufficient or having all the needed information resources to meet the information needs of its clientele. Hence, it has to resort to resource-sharing with users of other libraries. Resource sharing activities have always been one of the most important obligations of libraries worldwide (Abubaka, 2007). Abubakar citing Odin, stated that resource sharing is the process whereby the resources of a group of networked libraries is made available to the sum total of the persons entitled to use any of those libraries. Resource sharing encompasses cooperation, coordination, interlibrary loans, cooperative acquisition, cooperative storage and processing. In the words of Blakes (2006), resource sharing in the digital era comprises interaction by which a library makes its resources available to the clientele of another library upon request. Resource sharing among libraries create cooperative efforts and ensures that information resources not available in a library are obtained or requested from another library. By this way libraries can broaden the base of information availability, meet their patrons' information needs effectively and achieve mutual benefits through resource sharing system.

Resource sharing in the library world is nothing but simply sharing of library resources by certain participating libraries among themselves, on the basis of the principles of cooperation. It means that you are collaborating with one or more libraries to maximize access to a larger array of resources by sharing the collections of cooperating libraries or pooling funding to purchase shared digital resources. Many approaches to

resource sharing worldwide have merged, including the use of Internet for accessing millions of bits of information all over the globe, the electronic mail, teleconferencing and video conferencing. With the information /knowledge proliferation, retrieval of information has become somewhat difficult, with the advent of the Internet; information retrieval has been made easy.

The Internet is a worldwide network of computer comprising of thousands of regional networks scattered throughout the world, connects over the hundred million users daily. It facilitates resource sharing and collaboration at both local and global levels. The other services available through the Internet, such as World Wide Web (WWW), electronic mailing, interactive conferences, access to information resources, newsgroups, file transfer, prove as the gateway to the global information and help to share resources (Abubakar, 2007).

In general, web pages and documents on the Internet that provide useful information are referred to as online resources. The most frequently shared network environment objects are files, data, mails, multimedia and hardware resources such as printer, fax machines and scanners. Shared resources, also known as network resources, refer to computer, data, information or hardware devices can easily be accessed from a remote computer through a Local Area Network (LAN), or enterprise intranet. Successful shared resources allow users to operate as if the shared resources were on their own computer.

The Internet has a profound impact on the security in general and on the field of library and information science in particular. The dominance of the Internet not only provides great opportunities for libraries to provide better and efficient services but also poses tremendous challenges to librarians and library and information science scholars to strive to utilize various Internet technologies

to improve library and information services.

2.1 Review of Related Literature

2.2 Need for Information Sharing

Resource is becoming of importance because of the enormous increase in information available, otherwise known as information revolution or explosion, made possible by the advent of information and communication technology. The advent of information and communication technology has changed the concept of resource sharing, and has opened new vistas of resource sharing for effective functioning of libraries. Since insufficient resources abound in libraries, to satisfy the information needs of their patrons and users, libraries should participate in resource sharing using advanced technology such as the Internet, which would enable them locate, identify, and promptly deliver services to their clients wherever they may be. Resource sharing is rapidly gaining renewed significance in economic and social life, and collaborative consumption, or the sharing economy has attracted great interest (Sundararajain, 2016). The novelty types of sharing solutions to socio-economic challenges have the potential to substantially improve the utilization efficiency of limited resources by relocating them to those in need in ways that are relatively costless to the sharer, and in ways that set the stage reciprocation by the recipient. The recent growth of this disruptive economic model has been spurred by the Internet connectivity and the proliferation of mobile computing and online social networking platform (Santi, 2014 cited in Sundararagain, 2016). These innovations allow people to connect in technologically mediated social networks and exchange resources in a peer-to-peer fashion.

Supplementing your local collection through resource sharing is a smart way to ensure that our libraries have the resources to satisfy the needs of our patrons. Technologies

and strategies for sharing resources, helping you streamline workflows and improve resource sharing services by covering key strategies like interlibrary loan, consortia borrowing, document delivery and shared collection abound. Such technologies are OCLC Worldcat Resource sharing and other systems that facilitate cooperative, reciprocal lending. The advent of the Internet has made it possible for the resources of major libraries in the world to be available online and accessible directly from any part of the globe.

Resource sharing allows libraries and their patrons to access enormous variety of resources and other services which are not available in their libraries. Libraries participate in resource sharing in consideration of cost reduction in improving efficiency. Speaking on the need for resource sharing, Ibrahim (2006), states that the need arose from three underlying trends of modern society, namely: the growth of all forms of literatures, the increasing reliance of information to enable society function effectively, and the increasing availability of technology. Libraries and information centres have for many years considered resource sharing and cooperation as a major way of fulfilling these objectives. Spiers (2006) noted that if librarians are truly charged with creating, finding, evaluating, managing and disseminating information, reaching out and exchanging information with others is equally essential if they have to keep up with developments. Also, the desire for ensuring economy in the operations of library has always been one of the most important reasons and that is why libraries must share their resources for the benefit of their clientele worldwide.

2.3 Concept of the Internet

The term Internet is derived from the inter-networking that denotes interaction between networking of computers. Internet means International Telecommunication Network.

It is an umbrella under which different networks, small and big, freely exchange information across the globe.

It is a tool that connects millions of computer together giving them the opportunity to communicate with each other, information stored on host computers and acting as a tool to accessing the information on each other's computers.

It is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to link devices worldwide.

It is a network of networks that consists of private, public, academic, business, and government networks, of local to global scope linked by a broad array of electronic, wireless and optical networking technologies.

The Internet carries a vast range of information resources and services such as the inter-linked hypertext, documents and application of the World Wide Web (WWW) and the infrastructure to support electronic mail (e-mail), telephony and file transfer sharing.

It is a global network that comprises of many voluntary interconnected autonomous networks (Abubakar, 2007, Olalekan, 2016, Shahoo & Sharma, 2015).

The Internet Service Providers (ISPs) establish the world wide connectivity between individual network at various levels of scope and organizations worldwide on a vast network of servers. The Internet, known as the super high way, is the tool that will take one beyond telephones, faxes and isolated computers to a burgeoning networked information frontier, through which one can find the financial news, browse through library catalogues or exchange information

with colleagues (Shahoo & Sharma, 2015). Furthermore, it could be stated that no one owns the Internet despite the fact that various organizations across the globe collaborate to its development and functioning. However, the high speed, fibre optic cables (called backbones) through which the bulk of the Internet travels are owned by telephone companies in their respective countries.

Characteristics of the Internet

The Internet is a communication super high way that links, hooks and focuses the entire world into a global village, where peoples of all races can easily get in touch, see or speak to one another and exchange information from one part of the globe to another. It is the largest network in the world that allows computer users to communicate and access electronic databases with ease. Singh (2001) lists the features as follows:

Users across the world can connect or access the information irrespective of time and space factor.

Point to point communication, rather than one to many broadcast communication.

Provide access to large number of databases.

The facility for super linking from one server to another by clicking on a highlighted world which enables the user to directly switch to another data source on the other side of the world.

Instant and interactive community creation on a global bay.

Benefits of Using Internet

Internet has many benefits in academic cycle:

It provides round the clock access to the global source of information on all fields of human endeavour.

Gives researchers the ability to discuss and share experience with colleagues. It is very vital in accessing information for

researches through downloads of information resources.

In the library, which is the hub-nub of research in higher institutions of learning, the Internet plays a major role, now having the most significant impact on library services, operations and on the professional activities of librarians (Auda, 2016, Adegoje & Toyo, 2006, Olalekan, 2016).

The Internet provides various opportunities for the academic. It is a mechanism for information dissemination and a medium for collaborative interaction between individuals and their computers without regard for geographical location (Laittoproject, 2013). Internet access connects individual computer terminals, computers, mobile devices and computer network to the Internet, enabling the user to access Internet services such as email, and the World Wide Web. Internet Service Providers (ISPs) offer Internet access through various technologies that offer a wide range of data signaling rates (speed).

2.4 The Internet as an Enabler to Information and Resource Sharing in Libraries

It is neither possible for libraries irrespective of the size to depend solely and entirely on its own collection. We live in a time where the worth of a library is measured by the services it provides for its patrons in terms of aiding them to access universal information. Access to information is a fundamental right of all library clientele.

Libraries and information centers are today automating and networking their resources for the purpose of resource sharing. The Internet is a vast electronic library made up of millions of pages of information stored in hundreds of thousands of linked computers on the globe. The web has enabled metadata contents, full text of journals, preprints

technical reports, patents, course ware, etc (Singh, 2001). As a virtual library, it has a variety of e-data books, e-databases with unlimited information resources and databases. The Internet enables libraries to access programmes, retrieve documents, papers and books, exchange data and send emails. Due to the multifaceted nature of the Internet, it accomplishes three vital roles in library services:

- i. It is a resource that can be consulted and used like any other reference tool;
- ii. It is more dynamic and far reaching than any other resource used in the library setting;
- iii. It provides a medium of communication that has extended the potential of the librarian's interaction beyond the physical library to users, colleagues and other professional activities and relationships with library users (Olalekan, 2016 citing Sandore, 1997).

The Internet has become an essential component of the library environment and has added great value to the library and information service. It allows one to enter into the electronic information era. The Internet plays a vital role in the transformation of library system, and the way in which library resources and services are viewed. It provides links to various library sites, specializing in almost every topic, which can be accessed directly from any part of the globe through computer network. That is why it is possible for a student in a tertiary institution in Nigeria to access millions of information resources in a library in the United Kingdom.

The Internet has been integrated in the discharge of functions of the library ranging from acquisition of technical services, public services, communication, resource sharing, inter library loan, etc. It has changed the way librarians organize, manage and disseminate information. In fact, all kinds of library services, from membership registration to

document delivery services can be offered through the Internet. The Impact of the Internet to Library and Information Services include:

Collection Development: The Internet provides a forum for librarians to have easy and quick access to the suppliers of books, journals and electronic publications. Large numbers of selection tools like books in print, book sellers, catalogues are available on the Internet and help in the selection of right and current resources for libraries. Libraries can project the collection and activities on the site and supplement their services by utilizing the Internet, whose scope is unlimited. In fact, Internet has made the process of acquisition much faster, cheaper and easier for libraries. One can access online books such as Amazon.com, Barnes and Noble, IBS Bookshop, etc. through the Internet. It is an utility that allows librarian and libraries check for new titles, place order for them from the publishing house and even make payment through the system.

Technical Services: The Internet provides access to publisher's catalogue and online public access catalogue (OPACs) of many large libraries across the globe. Catalogues of these libraries can be accessed through the Internet and requests made for their use. OPACs have become popular source of bibliography and cataloguing information through the Internet. Libraries can scan these catalogues and download bibliographic data to be used in processing of resources. Internet also offers access to Dewey summaries for classification. Internet is a resource that permits accessibility to bibliographic records of millions of books as well as details of the collections of academic research and research libraries around the world and as such enables librarians and libraries to verify and compare holdings locally and globally. Online Public Access (OPACs) catalogues has countless electronic multimedia resources in terms of

electronic libraries of e-books, e-journals, e-bulletins, e-newsletter and e-magazines, and e-book purchases with full bibliographic information, which in turn aid librarians in cataloguing (Iheaturu, Umunakwe & Onyebinama, 2009).

Reference Services: A large number of reference sources are available on the Internet. These sources enable libraries to provide prompt and efficient reference services to the clients to ensure current facts and faster delivery of information products and services to clientele. Internet is a reference source that provides a wealth of up-to-date information available in print or bound volume. It is noteworthy to state that no library can be relevant in the era of ICT without Internet facilitated reference services (Baro & Asaba, 2010).

Information Services: The Internet enables libraries to provide specialized information services, such as current awareness services (CAS) and selective dissemination of information (SDI) to specific user groups. For these purposes, libraries will maintain user profile. Libraries regularly scan relevant databases, websites, and latest journals on the Internet and retrieve information suiting the interest of users, and communicate same to the users through emails.

Information Retrieval: Online information retrieval is one of the speediest to get the required information. A large volume of information can be searched rapidly and accurately through the Internet. The search electronic collection online enable libraries to subscribe a large collection of academic journals from many publishers from a single www interface that supports cross journal searching and extensive browsing. The system accommodates hundreds of thousands of journals which libraries can chose from to

include in their electronic collection. These journals will be loaded in their entirety on or before their publication date. Libraries using electronic collection online accesses journals remotely through www and patrons can search and browse citations from journals, abstracts and full-text articles from journal subscribed by their libraries. It also merges cost benefits associated with remote access to data with the exchange of local collection management and reduces information cost for libraries by centralizing storage access.

Inter-library Loan: Internet is a helpful media in inter-library loan transactions. The Internet contains bibliographic databases and online catalogues of a number of libraries. These sources enable libraries to find out the availability of a document in other libraries. Electronic mail (Email) has become fast and cheap communication tool for libraries to send and receive inter library cooperation requests. Libraries can make use of emails to provide effective interlibrary loan and document delivery to users.

Communication: The Internet has become one of the most vital means of communication, which its services are utilized in all walks of life, including library and information services. It is a communication device that provides opportunity for scholars to reach out to their colleagues elsewhere in the world for progress and development of one's profession or professionalism in general. It provides cheap and efficient mail transfer which can be effectively used by libraries and librarians to communicate with publishers, booksellers, and vendors of other library products and services with librarians and users all over the world. Email is the most popular means of communication and has become one of the modern methods of business communication worldwide due to its flexibility and reliability and the academic library is not left out of the

global system.

There are mailing lists, as in regular mails to address groups of people called Listserve, which serve as valuable resource for librarians. There is also the Usenet news, a public forum for discussion on the Internet, which provides large number of news groups or conference that have open participation which library patrons and professionals can utilize.

Table of Content: Most publishers of electronic journals are on the Internet and provide table of contents services to users.

Marketing of Library Services: The Internet makes it possible for libraries to design their website and use their homepage to advertise their services such as library catalogues, list of journals, CD-ROM, new information products and services, sale of library publications.

User Education: Due to huge Internet services, librarians need to provide intensive training in searching methods. Libraries can set up websites and provide information about library sections, and functions, collections to users and non-local users. Online education programmes can be provided through libraries homepage.

Resource Sharing and the Internet: Many libraries in the world are electronically connected and rely heavily on computers and telecommunication technologies as a means of providing library and information services. Information can be stored in various electronic forms and transmitted at high speed over electronic networks to wherever there are computer facilities to receive it. Arua, Ogbo & Nwebiem (2019) citing Daniels (1999) observed that the Internet and its combination has resulted in vast storage capacity, fast data processing and retrieval of information in a

variety of formats like data, voice, graphics, etc. The Internet is called a net of nets that enables a person to sit at his computer and in any other part of the world. It is a high level of connectivity that fosters unparalleled degree of communication, collaboration, information sharing and information access.

The existence of electronic catalogues with networks and linkages has driven away the exclusive right of ownership of traditional physical catalogues to online access and resource sharing. Through the networks and online services, the resources of a particular library can become accessible to other libraries of the same either locally or globally. Resource sharing using the Internet involves the use of online union catalogues. One can access, add and download them for use in their libraries. Online catalogues are bibliographic information retrieval system that makes access to information possible through online searching. The value of online catalogue lies on the fact the libraries can use the products of world's major cataloguing services, thus reducing the unit cost of local processing and improving the level of cataloguing and information services in the libraries. Online public access catalogue makes available tremendous entries to libraries, librarians, researchers and other users alike regardless of their location. A good example of online catalogue used by libraries is the Library of Congress (LC) catalogue/information/database, which has over one hundred and ten (110) million items available online at www.catalog.gov. and provides a bases for basic and guided search (Omekwu, 2008). Another use of the Internet for resource sharing is that it enables access to databases over network, Ohionet, LLINET, WLN, OCLC; BID (UK), etc. Full text journal accesses are also offered by the Internet.

The Internet is an important medium which the librarian has to explore to aid in processing, dissemination and retrieval of information. It has become an integral part of

library and information centre that helps in meeting the information needs of patrons as and when needed. In fact, the library and the Internet are being viewed as a versatile unified system, providing an enormous variety of materials in different formats (Shahoo & Sharma, 2015). The use of the Internet has enabled easy access to many resources and information sharing has become increasingly significant.

Conclusion

From the foregoing discussion, we can deduce that the Internet has in fact revolutionalized the various operations of the library such as document acquisition, technical services, public services, document delivery, resource sharing, to mention but these. The Internet, as a network of computer networks and indeed a virtual library has a variety of e-databases and e-databanks with unlimited information resources which enables libraries to access programmes, retrieve documents, paper, and books, exchange data and send emails. In this period of information and digital era, the Internet has become a necessity for libraries to enter into the electronic information era and provide modern library services and share resources with other libraries effectively and efficiently. The Internet is regarded as the topmost among sharable utilities available to libraries and librarians, schools, researchers and others who may require information.

Recommendations

The library seem to be intensively affected by the challenges of the Internet and the www which has shifted emphasis from collection development to information management, from ownership to access and the change in the nature, boundaries and structure of information. We recommend that:

· Since libraries do not have sufficient information resources to meet the information needs of their patron, they have to participate

in resource sharing using such technology as the Internet to connect them to other resources globally and to enable them locate, identify, and deliver services promptly to their patrons.

· Libraries should broaden their support repertoire and make provision for the research activity by ensuring that information library programmes encompasses the skills needed for online data and information retrieval, presentation and storage.

· Libraries should strive to utilize the various Internet technologies to improve library and information service delivery.

· In order to meet the information needs of patrons effectively, libraries need more support in the sophisticated way of searching for information and carrying out their daily endeavours.

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