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**Transforming Library and Information Services Delivery Using Innovation
Technologies**

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Abstract

In today's world, library and information services delivery are being transformed from their manual operations to new ways using technology. The study identified the paradigm shift in libraries and information services as a direct consequence of innovation technologies. The key concepts in the study are discussed. The new technology and communication tools are employed in rendering services to the patrons through appropriate channels for access to information with cluster of technologies referred to as the internet. Information technology has brought in sweeping changes in the way libraries function. Libraries need to access, evaluate, and measure the impact of information technology on them. Such effort will equip them with knowledge of turning IT into a boom for improving their services. The continuous shift in libraries from manual approach brought about positive impact over library and information services. The challenges following this development are highlighted and recommendations are made.

Keywords: Library, information, services Delivery, innovation, Technologies, Information and communication Technology.

Introduction

Libraries are mainly entrusted with a host of predetermined tasks like acquiring, organizing, preserving, retrieving and disseminating information to the user. From ancient times to the present Internet age, the primary objective of library has always been this (Gopinath, et al.2001). However, towards the beginning of the 21st century world over, there has been a phenomenal paradigm shift in the rendering of library and information services. The implication of the influence of Information and Communication Technology (ICT) in every sphere of human development is visible and its impact on library and information services cannot be overemphasized. Available literature (Sridhar, 1999; Igun, 2006) as well as observations across the world attests to this assertion.

In today's world, library and information services delivery are being transformed from their manual operations to new ways with the use of technology. The new technology and communication tools are employed in rendering services to the patrons through appropriate channels for access to information with cluster of technologies referred to as the internet. The technology called the internet has the ability to compliment, reinforce, and enhance educational accomplishments for the benefits of all. (Esew and Ikyembe 2013)

The resultant effect of this development has been the emergence of electronic services in libraries which has become the basis for digital libraries (Youngok, 2006). Library services are assuming a different dimension in philosophy, model and information delivery. The trend worldwide has proved that information provision and delivery had shifted from the traditional models to electronic and web-based formats. Traditional collections are giving way to if not total but at least hybrid collections. This change in structure is not without its attendant challenges as electronic and digital libraries come along with their peculiar characteristics despite sharing the same purpose of preserving, organizing and distributing information resources as in the case of traditional libraries (youngok, 2006).

In a similar vein, Mwamba (2002), noted that in the case of Nigeria, there is a shift in focus of operation from library-centred to information-centred; from the library as an institution to the library as an information provider, and to the librarian as a skilled information specialist functioning in all-related information environment, which require the use of new method known as automation of library functions for the enhancement of information access and delivery not physically contained within the four walls of the library but from library networking for information provision to area networking for all types of information resources provided. It is a known fact that the mental, social and economic development of the individual depends on the individual's access to information through reading which enhances productive approach to improving one's knowledge and understanding.

The 21st century is not without changes that are meant to put libraries and its offerings on a new pedestal. In his opinion, Hayes (1998) noted that libraries must 'move from resource centred, institutionalised and physically bound to network based'. Becoming a network based library however, has a lot of technological implications; the single prominent factor being information technology (Sridar 1989, 1995.1997, and 1999). Furthermore, literature affirmed that the change

in the nature and roles of libraries vis-à-vis the digital environment has equally brought about the need for development and acquisition of new skills and competencies (Yongok 2006).

It is worthy of mention that library and information services are key actors in providing unhindered access to essential resources for economic and cultural advancement. In doing so, they contribute effectively to the development and maintenance of intellectual freedom, safeguarding democratic values and universal civil rights. They encourage social inclusion, by striving to serve all those in their user communities regardless of age, gender, economic or employment status, literacy or technical skills, cultural or ethnic origin, religious or political beliefs, sexual orientation or physical and mental ability. The communities they serve may be geographically based or, increasingly, linked only by technology and shared internet (IFLA 2003). The import of this new attitude of information creation, access, retrieval, storage and availability for use in a major transformation towards creating information and knowledge based society for the good of all.

Statement of the problem

Libraries for many generations have taken many physical forms, rendering from large purpose-built buildings, to rooms in parent institutions and small temporary structures. The libraries then went further to penetrate those places that could not be accessed through road, rail, water and the beast of burden as a means of transportation. In today's dispensation, many libraries are now "hybrid" combining both physical space and collection with a virtual library of electronic materials and services. These development is a signal that there is paradigm shift from old operational method to one supported by technology of diverse form. One of the expectations of a library user is to be able to access accurate, current and appropriate information. This was however a difficult task to accomplish but with the technological innovations it is possible to provide enhanced information service from a single collection and hence new resource sharing programmes were introduced to meet user's needs. In the past, the inability of a library to meet all need of a user at a point in time can now be overcome as a result of internet and its associated technologies and using the global information all the need are met quickly and efficiently.

Research questions

1. What is the relevance of old method of information service delivery to users?
2. What service does the library and information centres offer to users?
3. What are the innovation technologies available for information dissemination?
4. What are the duties of practitioners in information dissemination?
5. What are the challenges encountered in the application of technologies in information dissemination?
6. What are the benefit derivable in the application of innovation technologies?

Need for the study

In today's world, there are very rapid changes in information environment. The consequence of these changes are impacting greatly on the way library and information services are being delivered to users. Following the application of information technology in the operation of library and information services, there are many changes in the way information is identified, acquired,

processed, stored and disseminated to library users. Due to this development, kunamadi and kumar (2007) identified new paradigm shift to include

- 1 Transition of information sources and systems from paper to electronic media
- 2 Complexity in information needs of highly demanding clientele
- 3 Increase in the cost and quality of information.

The implication is that the information technology has influenced all the components of a library system: Information sources, services, human resources and users (Ramesha and kumar 2004).

Objectives of the study

The general objective of the study is to highlight the impact of innovation technologies in the transformation of library and information service delivery to users. Application of innovative technology is value addition in service delivery with better speed, efficient and user friendly.

1. Identify the various old methods of information delivery to users
2. State the services offered to users by library and information profession
3. Mention the innovation technologies appropriate for information dissemination
4. Highlight the role of information professionals in the delivery of library and information services
5. Identify the prospects of applying innovation technologies in the dissemination of information services
6. Enumerate the challenges affecting the application of innovation technologies in the deliveries of information services

Literature review

Library

The definition of library is very necessary for this discourse. Library as a critical aspect of human development has many definitions. For the purpose of this work, few will be highlighted here.

Izevbekhai (1976) defined it as thus “libraries judged either from the perspective of history or merged against contemporary event performs such a vital function as the preservation of cultural heritage by being a repository of knowledge of succeeding generations”. The library as defined by afolabi (1986) is “one of the modern tools that man has devised to enable him control and improve his natural environment”.

The library as defined by Islam (2004) is an instrument of self-education, a means of knowledge and factual information, a centre of intellectual recreation, and a weapon of enlightenment that provides accumulated preserved knowledge of civilisation which consequently enriches one’s mental vision, and dignifies his habit behaviour, character, taste, attitude, conduct and outlook on life.

Information Services Delivery

Basically information service delivery deals with the way information practitioners relate and behave towards the users, colleagues, organisations and the society. As a result of current trends and development in the profession, there are challenges and opportunities which have impact in the delivery of product and services. As pointed out by Omekwu (2006) information service delivery is meant to support organisations, institutions and research by facilitating access to a libraries extensive range of information resources and challenges. The practitioners are expected to brace up for the demand of their work by improving on their competency skills; knowledge and attitude to enable them provide appropriate information service delivery. For a discourse of this nature and for the present technological pace around the world, the efficiency and relevance of any library and information centre is dependent on the effective delivery of qualitative service to users as well as recognition and careful adaptation of measures in the provision of library and information services capable of meeting societal needs. It is therefore the responsibilities of professionals to deliver on their mandate to the users, colleagues and society by ensuring fairness, justice and equity in the execution of services. The core values must be well articulated and knowledge supported with commitment that would help in upholding individual and collective responsibilities towards knowledge access and provision, doing right and upholding professionalism from the foundation of quality service delivery.

Innovation

Van de Ven (1986) defined innovation in terms of being “the development and the implementation of new ideas by people who overtime engage in transaction with others in an institutional context”. He continues: “An innovation is a new idea, which may be a recombination of old ideas, a scheme that challenges the present order, a formula, or a unique approach which is perceived as new by the individuals involved”. Innovations thus respond to a variety of new contributions ranging from new artefacts to more intangible outcomes such as new ideas or “combinations of ideas”.

Damanpour (1992) offers innovations as “the adoption of an idea or behaviour, whether a system, policy, program, device, process, product or service that is new to the adopting organisation”.

Technologies

The word technology has been used so frequently that we have taken the meaning for granted. To many, technology simply means the use of machines for produced human needs. To others, technology implies the art and science of applying man’s knowledge in all sorts of human endeavour such as engineering, medicine, culture, music so as to satisfy man’s needs. The dictionary of science and technology define technology as the practice, description and terminology of any or all of the applied sciences which have practical value and/or industrial use. Similarly, Merriam- Webster dictionary define technology as the practical application of knowledge especially in a particular area such as engineering.

Information and communication technology (ICTs)

Information and communication technologies (ICTs) are new technologies very critical for upgrade in the various areas of human society. In this context, it can bring about development and change in the digital age. ICTs consist of various collections of resources and technical tools that are used for connecting, spreading, storing and managing information (Pigato, 2004). The

new information and communications technologies, from e-mail to cellular telephony to teleconferencing, let more and more people share knowledge without having to be in the same place. Simply put, ICT represents the collection of hardware and software that is used for producing, preparing, transferring and storing data via devices such as computers, radios, televisions, etc, and it includes an extensive scope of traditional and modern media (Norad, 2002). As expressed by CTS (2003), information and communication technologies are technologies that facilitate communication and the processing and transmission of information electronically.

Library and Information Service Delivery: A View

In the past decades, library and information services have witnessed a change which has impacted greatly on human society across the globe. The revolution came with intervention supported by information and communication technology (ICT) which offers opportunities for knowledge and information dissemination to a wider audience irrespective of time and location. The use of ICTs provides an important platform for creating awareness, access and utilization of available resources. ICTs consist of various collections of resources and technical tools that are used for connecting, spreading, storing and managing information (Pigato, 2004). The sum total of this innovation is that ICT represents the collection of hardware and software that is used for producing, preparing, transferring and storing data via devices such as computers, radios, television, etc., and it includes an extensive scope of traditional and modern media (Norad, 2002).

Library and information services have gone through various stages of evolution. This is premised on the various stages of human development across nations irrespective of tribe, religion and geographical boundaries. As noted by Obayelu and Oyunlade 2006, the earliest form of technologists used for several centuries includes newspapers, books, photo albums, posters, theatre, human interactions, markets and plays. This was followed by an era of more sophisticated ICT peripherals. Among these are radios, televisions, telegraphs, audio and video cassettes, films and slides. These technologies have been used for several decades. Today, there is a further advancement in the services provided by information and communication technology (ICT). This group consists of computers, satellites, one-on-one connections, wireless phones (mobile), the internet, e-mail, the web, internet services, video conferences, CDROMs, personal computers (PC), distance control systems, informational-geographical systems, global positioning systems (GPS), electronic cameras, databases, etc. the hidden concept behind these technologies is that they are not automatically considered to be new, but their common and inexpensive availability has resulted in them being regarded as new.

Library and Information Service Delivery- An Examination

Libraries all over the world have an important role to play in the development and maintenance of a democratic society. They provide the conditions by which people achieve free access to information and knowledge. They provide opportunities to participate actively in the country's further development into a democratic society. In the case of developing countries, libraries form the most efficient weapon in the struggle against the digital divide. Libraries can provide access to global information via internet. Libraries at all levels are tools for people to obtain better living conditions. (IFLA 2003)

For today, reading print and electronic documents whether for business or pleasure is fundamental for any society in the modern world. It is the foundation of democracy, capacity, building and modernization. It is an important method for development as it offers visions and dreams, learning, skills and a creative impetus to the individual. In order to protect the world against ignorance, disease and poverty, access to information via libraries is essential. (IFLA 2003)

Today's library in whichever form should be run on information systems. As pointed out by Osundina (1973) the library of today should not merely store documents and preserve them, it must also devise means by which the contents of such documents can be rapidly and effectively transmitted for use. Information has always played a very important part in human life. However, in the mid-20th century, the role of information increased immeasurably as a result of social progress and the vigorous development in science and technology. In addition, as Trostinikov (1970) has pointed out, rapid expansion of a mass of diversified information is occurring, which has received the name 'information explosion'. As a result, the need has arisen for a scientific approach to information and for elucidation of its most characteristic properties which has led to two principal changes in interpretation of the concept of information. First, it was broadened to include information exchange of signals in the animal and plant worlds. The pace of change brought by new technologies has had a significant effect on the way people live, work and play worldwide. New and emerging technologies challenge the traditional process of teaching and learning and the way education is managed. Many higher education institutions have also exploited the potential of new information and communication technologies to develop new approaches to distance education, especially in business and management of computing. These new forms of globalization are beginning to replace more conventional types of academic exchange among the world's universities. Although traditional channels of communications technologies hold great potential for broadly disseminating knowledge at low cost and for reducing knowledge gaps within countries and between industrial and developing countries. In a broad sense, access to the right information at the right time gives people greater control over their destinies.

The coming into being of computers is a watershed that has transformed society from old to modern. Like other fields of human endeavour, there is no aspect of library operations that xxxxxxxx digital processing is not applied. Digital technology is of particular importance when information is to be gathered, stored, retrieved and evaluated (Kennedy and Davis, 2006). For a sustainable and dependable ICT environment, there is need to appreciate the old methodology of information management and supported by modern methods of information storage, retrieval and provision in digital age and this bring ICT in library operation and services to the fore. Ideally, ICT is expected to have a major impact on the management, structure and work activities of libraries. For the Nigerian environment, library professionals should bear in mind that ICTs are enablers of innovation in the managerial and operational processes in libraries. That is, the use of the technologies of modern computer-based information systems is a major force that has the capabilities of transforming the traditional methods used in cataloguing and classification, indexing, abstracting etc. it is expected that all technologies that process, store and communicated data and information in libraries should be managed as integrated systems and be used as access tools for the libraries resources (Kanu & Okon, 2010)

Across the globe, the transformation of library and information service delivery is taking a dimension never before. This development has brought information management to the fore in all areas of decision making. For the Nigerian situation, many libraries are now converting the contents of their print resources into electronic databases thus, increasing their dependence on technology. Unlike in the past, today, technology has provided opportunity for librarians in Nigeria to know how they can combine computer and communication technologies in the performance of library tasks. It thus confirms Williams Sawyer (2003), assertion that, in the era of information technology, “we will have everything connected to everything”, which are internet-based remote control devices to regulate our libraries. Technology has brought about a complete way of providing library services resulting to the development of new services (Gbaje, 2007). The Internet is now the dominant mode of information exchange in libraries and information services offered both in public and private transactions.

New Face of Library Information Service Delivery

The transaction of library and information services delivery got a boost in the last decade of 20th century and its significant impact witnessed an upsurge in all areas of human endeavours most especially in the developing countries. In Africa, ICT has become a formidable tool in delivery information services and thus created opportunities for instruction, teaching, learning and research. The consequence of this development became a catalyst in the improvement in quality of lives and development of societies with vibrant leadership.

In the delivery of this innovation, there have been seeming challenges. These are problems of adequate skilled manpower, problem of access, connectivity, funding, literacy, bandwidth and cost implication and good governance. Even at these challenges, there are indications of paradigm shift.

The emergence of a new thinking is a plus for human capital development. There is a departure from old ways of delivery information services are being challenged and society are being transformed into knowledge societies all over the world (Meora et. al., 2004). Black home in Nigeria, government has identified the importance of ICT in service delivery. Deliberate policies were pursued and gave impetus to open up the economy to attract investment along this direction. It was not surprising that the government was in the fore front which culmination in the launching of the global system of mobile (GSM) communication and thus made phones lines more accessible and affordable. This development gave a boost to internet access through business centres and cyber cafes across the federation.

ICT are new technologies that cannot for any reason be ignored partially for development of societies. The main reason for this view is that ICTs is one of the main catalysts for development and change in the era of digitisation. It is on the strength of this that Emenari (2004) pointed out that, the great transformation in the lives of the people especially in the developing countries depends on advances in ICTs. The rapid development of ICTs continues to have major influence on the livelihood of people across the world. Social research has shown that, adoption of ICTs can be a major or fuel for economic and community development in rural areas (Osiakade et al., 2010). As noted by Onwubalili (2004), “the tremendous changes are quite glaring in every facet of our lives and touches simplest of domestic services to corporate and limitless industrial application”.

ICTs such as Internet could create and meet demands which satisfies human and corporate needs at all times and levels (Nwajinka, 2004). In fact, ICTs are what rural dwellers needs to climb to the heights developed continent had reach. The recent development in ICT has broken national and international barriers and turned the world into a global village, making information available to everyone, everywhere and at any time it is needed (Onasanya et al., 2011).

Era of Transformation in Libraries

The shift from traditional libraries with site-specific collection to digital libraries where information and knowledge sources have no geographical boundaries seems to expand the services of library and information delivery to users. Before the era of ICT, libraries provided important services in processing organising storing and preserving information for individual users and organisations. Based on the various ways of information packing, the libraries became a veritable access point to information delivery to end users. Following the emergence of ICT, brought about changes to the organisation, access and management of information. With the new technology, it became possible to access a variety of information in a manner that would be simple and easy, and independent of time, place and subject Area. In present times, libraries are institutions with large collections of books and other materials and are usually funded and maintained by parent institutions. Usually, these materials are readily available to those who needs knowledge but cannot afford them to keep in their possession. From the evolutionary process, the society has transitioned from a time information was scare and precious to when there is much information available to respond to individual and organisational needs. In the past, the services provided by the libraries grew to include cataloguing, classification, indexing, current Awareness service CAS, selective Dissemination of information (SDI), reference, referral, photocopy services among others.

The traditional services libraries and allied professional are known for are upgraded and the consequence of using innovation technologies as identified by Gururaj and Kunar () are

These services are:

- OPAC and Web OPAC searching facilities
- Virtual Reference Desk (VRD) or Virtual Reference Services (VRS) using E-resources on net and CD-ROM, gateways, portals and online database.
- FAQ, Ask Librarian etc provide advanced services.
- Database searching for complication of bibliographies and searching topical information provided unique search features and variety of display formats.
- CAS based on electronic publications and internet resources.

Application of innovation Technologies

Taking a historical perspective of the library showed it as a storebase, an archive of manuscripts, art and important documents. Books at medieval times were not affordable for most people; as a result collections were put together under security checks. The situation was like that for a long time. Gururaj and Arun Kunar (n.d) in his work "Digital and virtual Libraries:

Transformation in Libraries and Information Services'' pointed out that a huge turning in the evolution of libraries as by Andrew Carnegie. Richard WEST and Peter Lyman as quoted by Lynch Clifford (2000) in hi communication ''from Automation to Transformation'' clearly indicated three phase procession in organization due to application of ICT.

1. Modernization: doing what is already in process but with more efficiency
2. Innovation: new capabilities possible due to trends like ICT
3. Transformation: fundamentally alerting the nature of organization.

In modernization of libraries ICT was used to manage the collection and automate the Libraries since 1980s. Later innovative concepts and transformation in library activities took place due to scholarly communication, database development, internet and web tools usage in libraries as well s print media shifted to digital and networked information appeared in libraries.

Gururaj and Arun Kumar (n.d) has also noted that the acceptance of new technologies, new information storage media, publishing trends, communication tools, internet, web tools, access to information and search is leading towards complexities like information mining due to development of databases and information warehouses, demand for global information is growing exponentially, transitioning from a product-based economy to an experience based economy, libraries are transitioning from a centre of information to a centre of culture and assist users in different ways. The implication is that the development in libraries might be slow, however libraries have initiated practices of subscribing to digital resources, e-books, e-journals and database. Use of internet is more in libraries as it is proved as tool for the information collection. Digitization and repositories are initiated in many libraries. However there is a need to initiate library and information services using modern information resources and technologies.

Implication of Technological Changes in Library Environment

Information has always been a prime factor for the development of society and is often regarded as a vital national resources. The growth of information and the dependency on it have paved the way for the information society and subsequently the knowledge society. Information has become important part of our lives and should be available when needed. For the daily operations in a library environment, information is a valued resource for meaningful communication.

Information services are generated using new tools and techniques to facilitate the right users to the right information (Khodeh and Dhar, 2002). Information technology has had a significant impact and has successfully changed the characteristics of information services being generated in libraries.

The use of technology in library operations meant that users can interact with online systems and have less reliance and dependency on library personnel. The current situation in most libraries today allows users to check circulation information without even contacting the staff in circulation unit. The implication is that the user friendly technology is interactive which most times does not require the assistance of library staff.

As expressed by (IFLA 2003) libraries have grasped the opportunities presented by the application of new technologies to revolutionise the technical processes required to deliver services. Examples include shared cataloguing, whereby many libraries share the task of preparing catalogue records so that duplication of effort is avoided. Other examples include self-issue and return systems, and security measures. The most dramatic impacts have been in the expansion of the range of materials collected and made available, together with the ability to reach users regardless of geography. The 'Library without Walls', once a dream is now emerging as a reality. The role of the library as a place for people to gain ICT skills in a welcoming atmosphere is becoming a decisive element in capacity building. Technology is gradually transforming the lives of library users who have been largely excluded from using traditional library materials, for example the visually impaired. This development is a pointer to the fact that innovation technologies introduced to information delivery is positioned to impact positioned on the lives of all people irrespective of whatever difference they might have. The library should accept this opportunity to better the lives of the human society. Innovation technologies have become a catalyst in the dissemination of information for all spheres of human existence. This era of variety of innovation has made the world a global village where by distance, location and mode of information package is no longer barrier towards accessing information have progressed from conventional books and journals to electronic journals and online databases, making it possible to explore to the worldwide pool of knowledge while sitting at one's desk or at home (Ashcroft and Langdon 1999).

One of the impact of the application of innovation technologies as observed by Okere and Ekere (2008) is reduced dependence on library for publication access as users who re computer literate can access Online publications from anywhere; information can be searched, transmitted and reproduced using network technology; and professionals have the opportunities to reach a wider audience of users and colleagues, and boundless access to global information and so on.

In similar way, the revolution in library and information services delivery premised on innovation technologies has come with invention of devices with huge storage capacity. CD-ROM's, DVDs and flash memory cards have changed the face of libraries. Online access to information has turned many libraries into "Virtual Libraries" (Mishra, 2000). Libraries are also changing the way in which information is stored and disseminate to users. These devices are capable of facilitating access to virtual materials that could enhance and promote research based orientation.

The implication of technologies in the library environment remains visible in our daily activities across the globe. For Ogunshola (2004), traditional channels of communication will remain important, the new information and communications technologies hold great potential for broadly disseminating knowledge at low cost, and for reducing knowledge gaps within countries and between industrial and developing countries. In a broad sense, access to the right information at the right time gives people greater control over their destinies.

Among the changes noticed as a result of the technological innovation is the ever-increasing demand for ICT facilities in the organization and provision of library and information services.

This is because; the use of technology has provided the capability of turning digitized libraries into credible and functional information resource centres. Ajayi (2002) noted that, the emergence of the digital economy and information revolution is now re-defining information search models in Nigerian library environment irrespective of the type and size. The growth of internet in the digital age has now created information search convenience for information seekers and the librarians are now more interested in providing information services to library users with multiple integrated technologies due to easy accessibility and retrieval of the information needed. It can be argued that the revolution in ICT infrastructure in the digital era is changing the nature and level of interaction between librarians and users. It is now enhancing affordable access to easy information retrieval as well as enabling libraries to cooperate with one another by way of inter-library cooperation. It has now made Nigerian libraries to become more effective and efficient in the performance of various tasks in relation to acquisitions, cataloguing and classification, indexing, serials control, processing, circulation and so on. ICT-driven libraries are gradually being transformed into new information service centres; providing electronic cataloguing, electronic inter-library loan services, and electronic circulation functions etc (Nkanu and Okon 2010).

Challenges of Technologies on Libraries

The application of innovation technologies in transforming library and information services delivery also brought to the fore some challenges. For instance, Okere and Ekere (2008) noted that it brought about increase in the number of published materials, it is therefore necessary for information practitioners to sharpen their skills and competencies in their professional areas to enable them cope effectively with a large volume of information resources available for use. The implication of this development is that the Library and Information Science (LIS) curricula would need to be strengthened to be able to detect the authenticity of published materials.

Following the trend of innovation technologies, there is the challenge of inadequate skilled library personnel that could meet professional requirements (Oduwole, 2005; Adedoyin, 2005, Igun, 2006). This view was also corroborated by Edie Resmussen Choi, who opined that “without well-educated digital librarians, digital libraries cannot reach their full potential” (2006).

The era of digitization has with challenges for both libraries and librarians; the sheer volume of information available in e-books, databases, archives and other digital materials has spurred innovation in the organization, management and distribution of library resources. For some time, some believed that just as bookstores and libraries were becoming irrelevant, that librarians would too. However, this could not be further from the truth. Search engines do provide a plethora of information, quickly and easily, but there is no guarantee of the quality of the information.

In the delivery of this innovation, there have been seeming challenges. These includes problems of adequate skilled manpower, problem of access, connectivity, funding, literacy, bandwidth and cost implication and good governance. Even at these challenges, there are indications of paradigm shift.

Conclusions and Recommendations

The libraries overtime have been an integral part of the society that surrounds it and from inception it has been providing rich and relevant services for its users. The main objective of the library is to support users in the quest for the information they need at all times. The paradigm shift in the methodology of what the library delivers to its users from manual to technology driven has become the catalyst that transform the library into a more vital and critical centre of human living. The libraries are experiencing a change in the mode they function and their service delivery process. Information technology is playing a critical part in the process and thus raises the standards of users' anticipations and expectations of new value-added services.

Over time, libraries are about collections, even at that, they are providing much more. At this point in time, libraries are expanding their holdings and the accelerating pace of information technology continuously raises the standards of users' anticipations and expectations of new value-added services. In this regard, information is available in variety of forms such CD-ROMs, online databases, e-journals and these are supported by CD-ROMs and memory cards which by their storage capacities enable users store materials that they have been able to access outside the internet access.

The implication of information technology is driven to information processing, access, storage and use for the future and its impact in reference, current awareness services and online public access catalogue cannot be overemphasised. In a nutshell, it deserves mention that ICT has bridged the gap of distance, time and labour between groups, corporate bodies, governments and international agencies on what one has, new demands and what one had that he or she wants to let out to others. ICT is shaping the image and perceptions of librarians particularly in developing countries as well as improving the skills of librarians for sustainable library services in the 21st century (Iwe, 2005).

The transformation of libraries and information centres is realisable through the various innovation technologies. There is possibility of achieving higher level of accomplishments through these technologies. However, there are basic issues that must be addressed to sustain the paradigm shift. On the basis of these, the following are recommended.

- I. There is need for adequate capacity building for professionals to meet with the realities of modern times. On the strength of this, practitioners require appropriate trainings to acquire skills, attitudes and values that will support them in the task ahead. The new trend in information and communication Technology (ICT) has come to stay and personnel that are not computer literate should take positive steps to remedy their

- deficiencies to fit into the new setting. Adequate training and refresher courses in relevant areas should be going to support the new era.
- II. Adequate researchers are necessary to benefits from the best global practices that will expose them to user studies, surveys and interactive sessions capable of adding value to work practices.
 - III. There is need to create awareness of information literacy among staff and users of resources through user studies, orientati9on and training workshops and seminars.
 - IV. For a meaningful transformation process, all stakeholders should be adequately taken through the various areas of information management for a detailed understanding.
 - V. There is need to deliberately work towards the realisation of modern library system using advanced technological tools capable of showcasing the capability of modern technologies to transform libraries and information centres.
 - VI. The government should make adequate financial support to facilities the provision of relevant and up to date information technologies infrastructure to meet best global practices.
 - VII. It is a known fact that IT cannot achieve world class practice without effective and efficient power supply. Apart from electricity supply from the national grid, state of the earth standby generator should be provided to check incessant power outages.
 - VIII. A good IT infrastructure supported by adequate bandwidth and necessary infrastructures is needed. This will guarantee a platform to build a solid information technology foundation that is sustainable and enduring.
 - IX. The intervention of government is recommended the importation of all equipment with little or no taxation to facilitate such gigantic projects and programmes.
 - X. Education is an instrument for development. International organizations and bodies should be called upon to assist in supporting such project that will add value to quality information delivery that will in turn reduce poverty and bring about the realisation of a well-informed society beneficial to all.

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