

# USING ICTS EFFECTIVELY TO LEVERAGE GLOBAL COMMUNICATIONS: THE CASE OF PUBLIC LIBRARIES IN ZIMBABWE

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## Abstract

*The last two decades have seen significant changes in the Information and Communication Technology (ICT) landscape, resulting in a fundamental shift in public library services and skills required of public librarians. ICTs are becoming more interdisciplinary and interpersonal in nature, requiring a broader range of skills to meet ever changing end user needs. ICTs have the power to create and deliver public library products and services that are on time, within budget, and of high quality. The advent of ubiquitous computing and the birth of e-terms such as e-books, e-mail, and e-agriculture are just but small indicators of the degree of change that an information-hungry culture has experienced over the past 20-25 years. For many public library end users, ICTs are now an enabler, rather than an enigma and has become the province of a broad user base. ICTs permeate each and every aspect of our lives and public libraries are no exception. This article explores the extent to which public libraries have been affected by modern ICT's. The paper is based on a literature review ICT usage by Public Libraries worldwide. It also looks at the current state of Public Libraries in Zimbabwe based on a snap survey conducted by the authors. Globally the including of ICTs in Libraries has enabled the continued survival of the Public Library and the skills of Public Librarians have increasingly changed to embrace information architecture and information management skills. Despite many challenges facing Public Libraries in Zimbabwe, the presence and expectations of ICTs are seen as enablers for global communications.*

**Keywords:** Information and Communication Technology; ICTs; public libraries; Computers; The Internet

## 1. Introduction

The adaptation of ICT's in libraries has resulted in the radical transformation of the role of library professionals and services and products provided by such institutions, argues Kawatra (1999). Furthermore, modern technology has helped to transform 'public' libraries from being mere warehouses to critical access centres for 'sustainable' information retrieval. This ICTs usage calls for a new thinking, new technologies and new strategies, which will help to ensure these public social institutions remain vibrant and relevant in providing for the dynamic information needs and access of the society. ICT uptake is an inevitable and necessary weapon for developing countries in order to contribute, shape and influence the direction of the international information order which is skewed heavily in favour of the resource endowed countries resulting in the information and digital divide. (Kevin 1996) basing his arguments' on Ranganathan five principles describes libraries as growing biological organisms that adopt themselves over a

period of time to changing environments. ICTs have become more pervasive as it now permeates all aspects of our daily lives, socially, culturally, economically and politically. In sub-Saharan Africa, Zimbabwe included public libraries are adjusting to ICT's amidst socio-economic and technical challenges.

## 2. ICTs and Libraries

A school of thought unpacks ICT as a combination of telecommunication and computing techniques which makes possible new systems, services and products to help people at work, in education and at home. In public libraries ICTs may be seen as the use or application of various technologies such as computer, reprographics, video recording and other electronic devices for the storage, retrieval, reproduction and dissemination of information in a library environment. The role of ICTs is that of a unified communications and the integration of telecommunications intelligent building management systems and audio-visual systems in modern information technology. Lalitha (2004) writes that ICT's consists of all technical means used to handle information and aid communication, including computer and network hardware, communication middleware as well as necessary software. A notable and simpler way to think about ICT is to consider all the uses of digital technology that already exist to help individuals; businesses and organizations use information for sustainable development. The use of information communication driven technology is fast spreading in almost all spheres of human, social and economic endeavors (United Nations ICT Task Force, 2005). Public libraries were traditionally viewed as mere warehouses of knowledge but they have now been given a new image in the modern world. (Vinitha et.al 2006) argue that activities which were carried out in libraries with soreness and nervous tension can now be accomplished with ease through the use of ICT's, for example, the organization of knowledge, circulation, acquisitions and other technical processing have become easier and streamlined into automated processes.

## 3. Public Libraries: Embracing the ICT (R)evolution

Public Libraries have gone through different phases from early oral traditions, ancient libraries of Alexandria (Egypt) and then print culture manifested through manuscripts, and books. These phases are well documented in ancient human narratives such as rock paintings. The invention of the printing press by John Gutenberg in the fifteenth century popularized the book culture. The medium for storage of information has developed from human memory, clay tablets, animal bones, skin parchments, manuscripts and books.

An ICT enabled Public library has gone through an evolutionary process. **Traditional** with print media and card catalogues – **automated** with print media as well as automated library functions such as Online Public Access Catalogues (OPACs) – **electronic** with fully automated functions and CD-ROM – **digital** with fully automated library services using Web technologies.

The **virtual** library is the current twenty-first millennium library or "*library without walls*" providing access to resources irrespective of time and space, emphasis on access to digitized materials wherever they may be located, with digitization eliminating the need to own or store a physical item. Digital and electronic libraries can be **virtual libraries** if they exist only virtually -- that is, the library does not exist "in real life." A virtual library can consist of material from a variety of separate libraries that are organized in a virtual space using computers and computer networks. It does not lay claim to physical possession of documents and it relies on the global information space.

#### **4. ICTs skills for public librarians**

The skills that public librarians require for a modern public library are continuing to change due to the dynamic nature of ICTs. The impact of these ICTs has been demonstrated in the changes in the nomenclature of the traditional librarian, for example, the use of such terms like, e-librarian, cybrarians, digital librarian, and so on. Globally, public libraries are now providing a wide range of sophisticated services and this has resulted in new names to reflect the creation of new services, for example, information portals, OPACs, databases, learning and ICT's hubs services. ICTs are being manipulated to bring new services, for example, internet cafes, virtual library services facilitating access to resources to distance learners and clientele.

#### **5. Value for public libraries in using ICTs**

Resource sharing among (public) libraries is imperative, as no single library can acquire all its needs according to (Adekunle, 1978). The concept of resource sharing is manifested through interlibrary cooperation, inter-library loans, Interlending and document supply services and other initiatives. Resource sharing activities are imperative because there is nothing like "library autarchy" and hence the inevitable need for networking. ICT uses in public libraries has been encouraged as a positive learning and recreational practice that allows clientele to learn through access to ICT's and to a wider communication networks such as the internet. ICTs provide an extended role to public libraries by increasing the range of their services, linkages with other like-minded institutions and for sharing their resources and expertise.

Information explosion renders individual public library unable to acquire all its requirements due to prohibitive cost and limited storage space available. (Adeogun,2003) quoted by Mphidi (2004) calls for (public) libraries to utilize ICT's to promote resource sharing at all levels, "... libraries need to establish effective resource sharing schemes. As a result of present proliferation of information, high costs of information resources and dwindling library budget; it is difficult for any library to provide all the information needs of its clients..." The utilization of ICT based networks facilitates resource sharing, inter-library collaboration, raising an awareness of existence of current and retrospective materials and the provision of access to materials. Networking through inter-institutional cooperation helps to overcome the problems of institutional insularity. ICTs provide an extended role to public libraries in terms of increasing the range of their services, linkages with institutions and for sharing their resources and expertise. Watson (2003) says networking is the key to survival in the information/knowledge driven economies.

#### **6. Internet and the public library**

The networking of people through innovative communication and computer technologies has created limitless opportunities for accessing all existing forms of social learning and intelligence. The internet is a classic example of convergence because it represents the coming together of computers and communication. The relationship between content and the technology to deliver it are now closer. The emerging convergence of technologies will result in a set of new services, solutions, infrastructures and other opportunities for example, digital technology and audio video and textual technology.

Most public libraries depend on networked infrastructures to access e-resources from funded programmes or free of use or open access such as EIFL, UNESCO, and the popular American corners among others.

These provide easy access to the most diversified sources of information hosted by individuals and institutions worldwide on a vast number of servers. Gates, 1997 notes that Information Technology is adapting to the social expectations of society through integrating the old and the new, "...the network movement enabled by the internet will become fully integrated into our lives.....It will not be 'cyberspace out there' that we will relate to, it will be everything we do and speech will be the dominant interface. We were born with ears and mouths, after all, not keypads and mouse. The technology is adapting to it" Gates and Dertouzas (1997) states ICT's have ushered in the age of "electronic bulldozers" whereby the human brain is expected to perform dull, boring and repetitive tasks while the computer takes over.

The Internet availability has enabled the following in Public Libraries and other settings:

- Access to current information by users.
- Online access to number of information sources like electronic journals, electronic discussion forums, technical reports, catalogues, database, abstracts, and online educational materials.
- Access to bibliographic and full text databases anywhere.
- Consortia purchasing and online access to shared resources
- Improved visibility of the public libraries, librarians and other stakeholders.

## **7. ICTs, public libraries and politics of information**

Even though the internet is turning the world into a global village, it is also threatening to increase inequalities and disproportions between the developed and developing world, through the monopolisation of intellectual capital by multinational and transnational corporations. ICT is a weapon in the hands of the possessed to further dispossesses the dispossessed notes Kumar (1999). This has resulted in the digital and information divide, information rich librarians and information poor librarians, librarianship of affluence and librarianship of poverty.

Durran (2002) calls for governments to subsidise the poor through provision of affordable ICT's. Librarians in developing countries should blend culture and technology in order to create relevant local content. Public Libraries can also use modern technology to repackage oral traditions, for example, the use of podcasts, radio, and video recorders to capture human narratives that are relevant to the local culture.

## **8. The Zimbabwean Public Libraries' and ICTs**

An ongoing survey of Public Libraries's use of ICTs in Zimbabwe by the authors has been used to identify progress and challenges on use of ICTs. Two Libraries have been supported by the USA Embassy to establish Internet Corners – however the main purpose is to market educational opportunities by American Universities. Although there are benefits for citizens to use ICTs in global communications, this does not provide growth opportunities for individual public libraries concerned.

One Public Library in Bulawayo has 25 computers for the public use, however they report five of them are not working.

There is a great potential in most of the libraries demonstrated by the current and potential user-base. (see Figure 1 on next page)

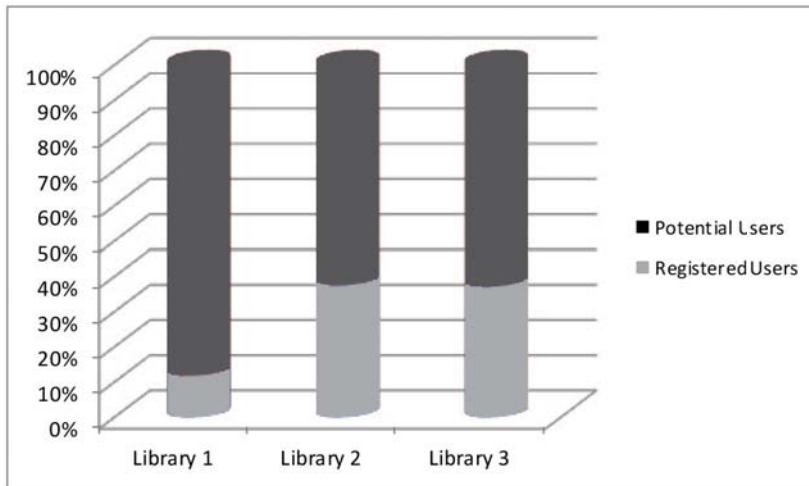


Figure 1: User versus potential users

There is a limited supply of computers for both staff and library users in each of the libraries surveyed. Besides having computers in the libraries, the use is not geared towards library automation or digitization. The following figure (2) shows the distribution of computers between users and staff in the three libraries evaluated.

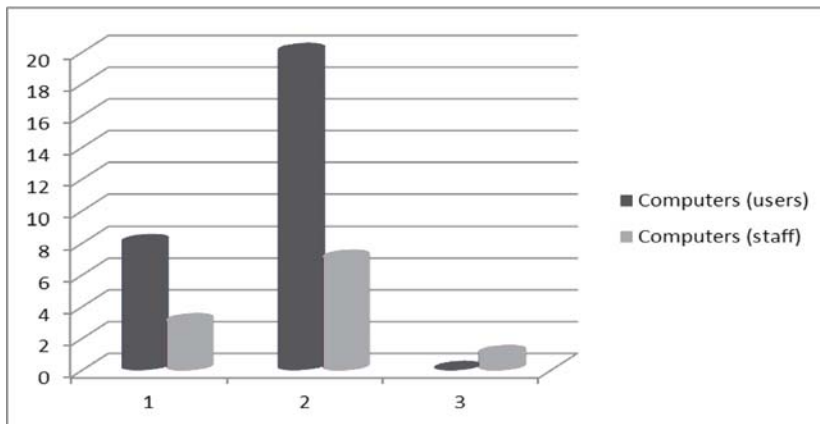


Figure 2: Computer for staff and users

Although most Librarians are now aware of the ICTs availability, most public libraries are still trapped in traditional librarianship. The reasons vary from funding constraints, political and economic environment, lack of infrastructure to lack of adequately trained staff.

Survey respondents indicated the following as major constraints:

- Lack of computers and other hardware such as copiers, projectors, scanners
- Poor of lack of connectivity
- Constant breakdown of ageing computers
- No Wi-fi availability
- Lack of Funding
- Poor IT skills

There are many other contributing factors to the above listed challenges. However for purposes of this paper we can therefore conclude that contributing factors are:

- There are poor communication networks although slowly improving with ongoing fibre optic cabling
- High costs of maintaining ICT infrastructure (limited or no financial resources)
- Dependence of donations such as American corners
- Poor Policy guidelines (national and local government levels)
- Lack of transformational leadership who embrace ITCs as part of cost efficiency savings.

## 9. Conclusion

The study found that most Public Libraries may have computers but they are not using them for the advancement of automation and online global communications. The increasing availability of broadband offers opportunities for Public Libraries to think now and act upon resource mobilization and equipping of their staff for the digital age. Public Librarians are challenged to focus on automating their library systems of functions such as cataloging, acquisitions while also focusing on end-users to enjoy access to the Internet. Local authorities are also urged to see Libraries as enablers of the information society for the 21<sup>st</sup> century through mobilization of resources to ensure the transformation into virtual libraries embracing ICTs.

## References

- Adekunle, W. A. O. 1978 **Library co-operation in Nigeria: The role of National library** *Nigerbiblios*, 3 (4).
- Fitzgerald, B and Savage F. (2004) Public libraries in Victoria, Australia: an overview of current ICT developments, challenges, and issues. *OCLC Systems & Services: International Digital Library Perspectives*, Vol 20(1): 24-30
- Gates, B. and Dertouzas, M. (1997) Friction free capitalism and electronic bulldozers. *New perspectives Quarterly*, Spring, 15.
- Jakupec, V. (2000). Knowledge, e-learning and higher education in APEC countries: Narrowing the gap between developed and developing countries. *Economies Journal of APEC Studies*, 3(1)

Lalitha, P., 2004. Impact of information communication technology on library and information centres. [http://www.alibnet.org/events/lectures/MLSeries7\\_PLalita.pp](http://www.alibnet.org/events/lectures/MLSeries7_PLalita.pp). [Accessed 21 June, 2011]

Makori, E.O. (2009.) Contemporary Issues in Information Management: A fresh look for information professionals. *International Journal of Library and Information Science*, 1 (6)

Mphidi, H. (2004) "Digital divide or digital exclusion? The role of Librarians in bridging the digital divide" Paper presented at LISA 7th Annual conference Pholokwane. <http://www.liasa.org.za/conference/conferences2004/papers/LIASA-conference>. [Accessed 24 April, 2011]

Omekwu, C.O.( 2006.) Managing Information and Technology: Critical roles for librarians in developing countries. *Electronic Library*, 24 (6)

Roush, W.(2005)The Infinite library. <http://www.arch.ttu.edu/people/faculty/Neiman../pedagogical/readingstructure/media/0..> [Accessed 15 November, 2007]

United Nations ICT Task Force, 2005. Innovation and investment: ICTs and the MDGs.

Vinitha, K. (et.al)(2006) Impact of Information Communication Technology on Library and its Services. *Paper presented at the DRTC-ICT Conference on Digital Learning environment, January 2006 in Bangalore.*

Walsh, C. (2011) Mapping our skills in learning and teaching. *CILIP Update, March, 2011.*

Warren, M.F.( 2002.) Adoption of ICT in agriculture: intrinsic and instrumental roles in technology transfer. [http://www.cazv.cz/2003/2002/ekon1\\_02/warren.pdf](http://www.cazv.cz/2003/2002/ekon1_02/warren.pdf). [Accessed 4 March, 2011]