SHORT COMMUNICATIONS

Internet in the Library: Potentials

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Abstract

The Internet has become one of the most important media of communication of our times. Its impact on information providers and seekers is tremendous. The library being one of the key players in the provision of information from ancient times has not remained unaffected by Internet. The paper briefly looks at the potentials offered by Internet and why libraries, information centres and research institutions in Africa should have Internet connectivity. It further highlights constraints to Internet access in an African setting.

Introduction

The Internet is a powerful tool to search for, retrieve and disseminate information. It is indeed offering unprecedented access to information in all kinds of formats (multimedia). It has to some extent transcended the barrier of space and time because information resources such as library collections in various parts of the world can be accessed almost instantaneously. As the Internet has become more commercialized, it is increasingly being used by all sectors of society as opposed to its origins when it was the domain of academics and researchers. It has made the information resources of the world more accessible to ordinary people all over the world. Since Libraries are providers of information, they have not been by passed by the advent of Internet.

The Internet has its origins in the United States Defence Department in the 1970's. It was a computer network designed to survive all sorts of man-made and natural disasters. In the 1980s scientists in the universities and research centres developed it further by creating a high-speed network called National Science Foundation NETWORK (NSFNET). In the 1990's, companies started creating and setting software and hardware that allow private business and institutions to connect to this network and this gave rise to what is called the Internet today (Alspach, 1995)
What is Internet?

Internet is a large computer network formed out of some thousands of interconnected networks, and it supports a whole range of services such as electronic mail, file transfer protocol, database access etc (Cawkell, 1993).

Services Supported by Internet

Internet E-mail- This refers to mail created and sent electronically. Each person who uses E-mail receives an E-mail address which they use to send and receive messages on a computer. The E-mail is far less expensive than the fax and by far faster than the regular mail.

Listserv- E-mail is also used as a tool to share information swiftly and on a wide scale by using listserv. These are groups that share a broad subject area. Every message sent to the listserv is distributed to all members of the listserv. This could mean thousands of people. Each listserv has an address where its users send requests and questions and search the archives. Discussions, jobs and conference announcements are posted on the listserv.

Newsgroups- This is similar to listserv. The difference is that unlike listserv, newsgroup does not send messages to members’ E-mail addresses. They have to go to the newsgroup to read the mail or message. These newsgroups, like the listserv, centre around a broad subject area.

E-mail, listserv and mail groups may provide a link for solving reference problems, learning about reference sources, sharing information etc.

Remote Login- This allows users to connect from their system to a remote system. This is achieved by a software called Telnet. Hundreds of institutions and libraries have their databases and catalogues available on the Internet and can be accessed by remote login.

File Transfer Protocol (FTP)- This allows to move (download and upload) files and programs from computers all over the Internet to your computer. This is one of the big advantages of Internet connectivity.

Worldwide Web. Commonly referred to as WWW or the web page is the latest search tool on the Internet and has become the most popular way of locating and retrieving information. It has the ability to browse through a list of subject headings to get an idea of what is available on the net. WWW is enabling reference librarians to answer questions for which they had virtually no background and the information is usually more up to date than printed resources. One librarian points out that with Internet, you
can have a growing information database without data collection and maintenance responsibilities (Freedman, 1996).

Besides being a search and retrieval tool, the web page can also be used to disseminate information. Libraries and research institutions can create a web page where they can publicise all sorts of information. This can include putting the catalogue, electronic journals, services offered, on-going research etc. on the web page. It also facilitates peer review for academic publishing and research which can strengthen the quality of research and publications. This is where information on African research can be disseminated. This to a great extent can reverse the trend of less coverage of African research in international journals and other publications.

In summary, Internet access provides the following benefits:

- Access to colleagues through nearly instantaneous transmission/receipt of E-mail messages and files.

- Powerful search utilities to locate information stored on millions of computers around the world.

- Access to a large and growing array of online journals and databases on various subjects.

- Use of remote computer resources and instrumentation.

- Distance education and other cooperative projects.

- Facilitation of peer review, thereby strengthening research and journal publication.

- Dissemination of all kind of data and information.

Implications of Internet in the African Library and Research Centres

In this section we would like to point out three important implications of lack of Internet connectivity to the library and research centres and one that comes with Internet access.

Firstly is the issue of Africa's effort to contribute to world's scientific, technical and academic information. Much has been written on marginalization of African's effort in this regard. Surveys of abstracting and indexing, reference sources, journals and books generated in the development world show little coverage of African contribution. Much of the information generated in Africa has remained in grey form for various reasons. Internet connectivity can be used to disseminate much of the grey literature. Lack of
Internet access will mean greater marginalization. Thus, Internet access offers Africa an alternative towards ending this isolation. (AAAS, 1996).

Secondly, Internet, looked from a positive angle, is a cost-effective way of providing access to world information vis-a-vis resource scarcity which results in failure to maintain journal subscription and the capacity to buy new books. Journals are increasingly being made available on the Internet, thus making it possible for African academics and researchers to get instant access to the latest published research in their disciplines.

Thirdly, the use of new Information Technology (IT) has become part of economic development activity of the developed world. It is changing the world within which African countries are struggling for survival and growth. These changes and their means cannot be ignored by Africa if they are to survive as the world moves into the information age. For example, the capacity to generate over 90% of economic, scientific and technological information rests with western countries and a major proportion of this information is in demand in Africa. Such information is increasingly being produced in non-conventional formats i.e. the CD-ROM. Here again it is evidently clear that lack of Internet connectivity in Africa will mean widening the gap between information rich western world and information poor Africa. Efforts to develop information systems and services in Africa should as a necessity include IT.

The fourth implication deals with controversial materials on the Internet. This is with regard to pornography and state security. One can access all sorts of information on the Internet. Government authorities would obviously want people to see some but not all the information following through the Internet. This is an area that needs serious consideration when considering Internet connectivity.

**Constraints to Internet In the Africa Setting**

The major factors militating against the effective application of IT in Africa have been cited by a number of authors Inganji (1990), Kaul (1988), UNECA (1992) and Zwangobani (1988). This section highlights some of the constraints.

The initial cost to set up Internet facilities is a problem to many libraries and research institutions. Almost all African countries are experiencing the scarcity of foreign exchange to purchase/import IT from other countries. IT imports have to compete with other pressing needs such as food, medicine and other capital goods.

Development of broad based IT infrastructure is dependent upon an efficient telecommunication infrastructure as it facilitates transmission and exchange of data and information over networks. Generally these facilities are underdeveloped in Africa. Associated with telecommunication is the expensive rate that companies charge for
dedicated lease lines. The lack of Internet service providers (ISP) is another constraint.

The shortage of IT specialists is increasingly being experienced as more and more IT is introduced in the library and information centres. This shortage is compounded by the lack of local training facilities locally in most of the African countries.

Conclusion

Internet is a means of communication that cannot be ignored by information providers wherever they may be located in the world. Doing so would mean increasing the gap between the information rich and the information poor. The potential to use Internet to share Africa’s economic, social and scientific information widely and in a cost effective way is great. Although Internet has not, and will not replace printed formats in the foreseeable future, it provides a wealth of information that is hard to acquire in printed format, given the state of the economy in most of African countries. As the world is moving into the information age, Africa cannot afford to lag behind in the use of new IT. Therefore policies that seek to encourage development of IT infrastructure should be formulated in order to keep abreast with new development in information dissemination and provision.

References


