DEVELOPMENTS IN COMPUTER TECHNOLOGY IN THE UNIVERSITY OF THE PHILIPPINES: USERS' EXPECTATIONS AND NEEDS

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ABSTRACT: The widespread use of computer technology has spawned the expectations of users for speedy, efficient, and usable information because they are no longer satisfied with the traditional flow of the current surplus of information materials. In the University of the Philippines system, this need for access to usable information has materialized from recent subscriptions of CD-ROMs and from linkage with the Internet through the Engineering and Science Education Project (ESEP) of the Department of Science and Technology (DO ST). However, before the potential benefits brought about by these innovations can be fully realized, a number of barriers have to be overcome, among which are the misguided perception of library managers on the role of the network as information providers and the lack of handling skills by concerned personnel.

Introduction

In response to a dynamic information environment, users are now aware of the availability of varied information and communication technology suited to their individual requirements. These technological advances, which include computerized databases, CD-ROMs, telecommunication networks, electronic publishing, fax machines and photocopiers, have a great impact on library services, most notably in the areas of document delivery and interlibrary loan.

Background: electronic document delivery is a hot topic

In libraries of academic institutions such as the University of the Philippines, users rely heavily on serial articles to such a degree that the current percentage of requests for interlibrary loan and delivery of journal articles is much higher than in any other type of library. In a study conducted in the mid-80's, a great majority of requests for serial articles was met with the provision of photocopies of the requested papers (Walhart 1985, cited in Kinnucan 1993). Before the introduction of the photcopying machine, it could thus be surmised how helpless libraries were in the midst of a deluge of interlibrary loan requests for journal articles since most were not, and still are not up to this present day and age, inclined to lend entire journal issues, especially bound volumes.

Telecommunication networks and fax machines have similarly accelerated the provision of requested documents for libraries that use them (Medina 1992, cited in Kinnucan 1993). The
The introduction of computerized databases has made it possible for information users to learn of information they might have otherwise overlooked and has made it easier for librarians as well to locate which library has the needed document.

The above-mentioned innovations have undoubtedly changed the way interlibrary loan is accomplished and have made document delivery a reality (Kinnucan 1993).

Current advances

Worldwide initiatives in the information field are conceived to facilitate easy access for researchers and practitioners to their required information. The introduction of the CD-ROM in the mid-80s has made possible the access and dissemination of a large amount of bibliographic, full text and other data. CD-ROM titles are now available in the market covering a wide range of scientific disciplines. Simultaneously, the development of new interfaces and their continued update aid in extending CD-ROM feature services to a wider spectrum of the information community. This has therefore caused a change in the management of electronic searching. Librarians who were, to a certain point, considered intermediaries of information now had to focus their attention on training inexperienced users to search electronically.

As CD-ROM’s popularity grew, so did the numbers of users and their different searching needs. As a result, experienced users requested features that would allow them to navigate and find exactly the information they needed from the available databases while those not as familiar with the new technology wanted the search kept simple.

However, while acknowledging the definite advantages of computer technologies in which CD-ROMs operate, Keylard (1993) mentions a few caveats that may lead to the under-utilization of CD-ROMs:

a. the misconception of end-users regarding a particular computer technology such as the CD-ROM;
b. the assumption that users and intermediaries require no training;
c. lack of understanding of the technology involved;
d. lack of integration of said technologies in library services; and
e. lack of long-term provision.

These so-called ‘pitfalls’ can easily be avoided or overcome by information campaigns initiated by either intermediaries or unit heads, appropriate training and, an assurance of funding support. A sound implementation plan needs to be conceived prior to the employment of such technologies. The parent organization should also make a commitment to integrate such technologies within the various library services to ensure their maximum use.
Information and the Internet: The UPCOST Engineering and Science Education Project (ESEP)

Dubbed as the “mother of all networks”, Internet is the world’s largest computer network linking other networks in various countries. According to Steven Goldstein, Internet Program Director, more than 30,000 autonomous networks registered with the National Science Foundation Network (NSFNET) have linked to Internet in 1993 (Magno 1994).

The Philippines’ link to Internet was finalized in December 1993 following an allocation of P1 2.4M from the Department of Science and Technology (DOST) (Hilotin 1994, Magno 1994). This amount, equivalent to roughly half a million dollars, was for the installation and financing of PhilNet, the node which would serve as the central computer station through which remote computers can access the Internet’s resources.

Institutions or individuals from the academic, research and commercial sectors connect to PhilNet on a subscription basis. The connection rates depend on the classification of the user, type of connection and speed of lines. For ESEP, presently in place are the access nodes in the University of the Philippines (UP) in Diliman, Ateneo de Manila University (ADMU), De La Salle University (DLSU), University of Santo Tomas (UST), UP Manila, UP at Los Banos, Saint Louis University in Baguio City, University of San Carlos (USC) in Cebu City, Xavier University in Cagayan de Oro City, Mindanao State University (MSU) in Iligan, and the DOST.

It is widely believed that such direct link to Internet will hasten the transfer of scientific discoveries to and from the Philippines, since it takes months for such data to be printed in a scientific journal, stored in a library, and disseminated to the scientific communities of developing countries. Outside of this network, however, very few librarians possess the adequate know-how on automated library systems, Internet, and other applications of information technologies. To ensure the creation of a truly nationwide network, training courses are being proposed to update the technological know-how of these librarians.

Status of library networks in the University of the Philippines

Library networks leave their greatest impact on the librarians and users alike. Librarians have been offered more challenging opportunities for better service as new technology replaced their usual manual routines, i.e., roles as negotiators, facilitators, educators, and information brokers (Stueart, 1982). These roles, nevertheless, require training and skills development for effective database handling and better appreciation of the technology, to ensure successful integration of the technology into the traditional library services being offered.

On the other hand, users are able to access remote information in so short a time. Users are assumed, however, to understand different communication media. But since network systems are
designed for self-help, users are faced with either of the following obstacles: non-readiness, lack of computer skills, and worse, alienation. Users would then have to seek assistance from either the information managers or intermediaries. Hands-on seminars regularly organized, e.g., each semester or year, may become a necessity for a growing number of users. User-friendly manuals and computer routines may be produced since these can be avenues of self-training. The latter two, for our case, remain to be realized in the near future.

Conclusion and Recommendations

With the coming of what is known as a global information infrastructure (Valentin 1995) one can foresee a scenario for the world of information that is “high-tech” and highly profitable. However, information users in the University of the Philippines perceive that the librarians/information providers still need further training in order to fully understand the potential of such technologies and increase their competence in manipulating these sophisticated tools. Training should augment their experience and should specifically develop their expertise in information retrieval.

The problems we encounter, as with other Third World libraries, can likewise be alleviated if a budget can be allocated to sustain continuous on-the-job training for the librarians/information providers, because the pace of technological change is at such rate that computers have an average life span of three to five years and the electronic environment changes rapidly.
References


Magno, L. 1994. Telecoms link to Internet that will flood RP with trade info being finalized. TODAY, 8 Apr. 1994:13
