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Role of ICT in Library Administration with its Impact

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Abstract: The term "information" refers to any form of know-how, facts, or data. Information should be repackaged to make it more easily digestible for users. Knowledge is transformed into information through the act of "externalization," or the act of communicating it to others. Communication technologies are only useful if they allow users to access information quickly, cheaply, and reliably. The library at the university offers a wide variety of ICT-enabled services, such as online catalogue (OPAC), electronic resources (e-resources), and more. Research has been conducted to determine the effects of information and communication technology (ICT) on various sections of the CUSAT library by monitoring the operations of these areas, interviewing staff and patrons, and examining library databases. This paper serves as a presentation of the research findings.

I. Introduction

Better service for end users is the driving force behind the development of information technologies, which involve the electronic or manual transmission of data or messages. Reduced computation time, resource sharing possibilities, and cost-effective file storage options across a variety of media types (discs, tapes, etc.) are all examples of the ways in which information technology contributes to more efficient data management.

Various labels are being applied to the current era; these include the "information age," "wired society," "global village," "information superhighway," "invisible colleges," and "technical gatekeepers," all of which have significant bearing on the library's ability to provide its traditional services. Online databases, microfilm/fiche, telecommunications facilities, videotext, and other formats have all contributed to the evolution of information storage and retrieval. The use of computers and other forms of electronic media has revolutionized library services. Recent instances indicate that IT is crucial for keeping up with the best library practices around the world, whether that be electronic resource management, digital integration, license information, or automation. Librarians in the IT world would learn that "library without walls" are really just libraries with new walls, ones that are technologically limited, legally constrained, and administratively stifling.

II. Impact of IT

A. The library services have been significantly impacted by the rise of information technology (IT). Results can be summarised as follows:

B. Automation of house-keeping functions

Gaining
Classification
Movement
Serial control

C. Library facilities

Present Consciousness Facility
Discerning Distribution of Data
Reflective hunts
Orientation facility
Interlibrary loan service
Document Delivery Service

III. Automation of house-keeping functions

- **Gaining:**

In the acquisitions department, a library must keep and use a number of different records. Massive amounts of data, files, records, book orders, etc., might be difficult to manage manually in manual acquisition systems. It is anticipated that an automated acquisition system will carry out a number of managerial tasks in addition to the reduction of existing clerical tasks, including budget and fund allocation, detailed information about vendors, pre-order searching, particularly to avoid duplicate orders, the creation of purchase orders (foreign / local), invoice processing, etc.

With the advent of the Internet, book, journal, and electronic publication distributors are now within easy reach of librarians. Reviews, abstracts, annotations, prices, and more can all be found on the Internet sites of major publishing houses and bookstores. Thus, e-mail subscriptions are possible online.

- **Classification:**

The library's catalogue is a fantastic tool for locating its resources and locating information. Unit cards were prepared by librarians in the traditional card catalogue for each of the four access points (author(s), title(s), subjects, and shelflist). Each item in the collection had its own card that detailed everything about it. Keeping the card catalogue up-to-date was a manual operation that required adhering to a set of filing standards, removing cards for goods that had been borrowed or sold, and making cross-reference cards. Every library that used this method had to update this ever-changing file, or else the catalogue would become out of date.

Some of the many features of the IT-enabled cataloguing package include the electronic formatting of catalogues and the automation of membership details.

Online Public Access Catalog is quickly becoming the standard in place of traditional card catalogues (OPAC). Most OPACs began life as library circulation systems, with the public access interface added later. Using the Web OPAC interface, this catalogue can now be be distributed online. You'll need a user name and password to gain access to the library's vast collection of resources.

The road to collecting, indexing, and cataloguing the World Wide Web has been long and arduous, but there has been some progress.

The process of discovering and getting the necessary information is greatly aided by a catalogue of Internet sources pertinent to the topic. Online public access catalogues (OPACs) have rapidly gained popularity as a go-to resource for bibliographic and cataloguing data. The bibliographic data needed for the automated processing of books can be downloaded from these catalogues by libraries. Preparedness of the book catalogue for newly acquired volumes is now possible on the day of acquisition.

- **Movement:**

The circulation department is responsible for a wide variety of tasks, such as checking out and returning books, making reservations, keeping track of circulation data, notifying patrons of overdue books, and more. Manual distribution methods are labor-intensive and prone to mistakes. Automated systems provide for a plethora of services, including those for students, teachers, and special, and inter-library loan users. Material and user bar-coding scanning is a huge time saver.

Some of the functions offered by an automated circulation system are:

- ❖ Member details
- ❖ Loans and reservations
- ❖ Prioritized reservation queries
- ❖ Fine calculation using rules – based computation of fines for overdue items
- ❖ Inventory and circulation status
- ❖ Number of transactions in an hour, in a day, in a week, in a month etc.
- ❖ Breakdown of transactions subject – wise and category – wise

- **Serial Control:**

Serial records are traditionally manual files, although many attempts have been made to use Punched Card Systems.

An automated serial control system performs functions such as:

(I) Ordering:

- ❖ Ordering new journals
- ❖ Renewal / Discontinuation
- ❖ Sending reminders
- ❖ Receiving the journals

(II) Reader Services:

- ❖ Preparation of a list of periodicals received
- ❖ Preparation of a list of periodicals cancelled
- ❖ Preparation of a list of holdings with their status (eg on shelf, in binding, in circulation)

(III) Management Services

- ❖ Keeping track of amount spent on serial subscriptions, serial binding
- ❖ Estimation of the budget for the next academic / financial year
- ❖ Announcement of the missing serials for re-ordering the same
- ❖ Further, a Union List of Serials holdings by libraries within a geographical region are useful and can be easily done by the computer.

IV. Library services

- **Present Consciousness Facility:**

Numerous CAS exist, each with its own unique set of features and uses. Information is culled from magazines, books, papers, patents, etc., and alerts are sent out to users. Time lag between the publication of the original material and subsequent coverage in periodicals of any kind is something this service seeks to address. Those services can be delivered more quickly by the automated systems. Online promotion of these main papers is shortening the time it takes to receive it and making it accessible to users from any location at any time.

- **Reflective explorations**

The process includes actions including converting the user's query into a search strategy, checking the strategy against the database's document descriptions, and displaying matched references. The user may now have a one-on-one conversation with the database, conduct a search, and either view the results on the computer screen or print them out. The user can instantly access the database and make adjustments or improvements to his search technique thanks to the online search capability. It's also possible to construct an online database by posting papers available in the library's collection, or by importing data from an existing database.

- **Reference Services:**
  - ❖ Reference and information services are particularly vulnerable to the rise of digital resources. Users' interactions with librarians, the types of reference materials utilised, research strategies, information distribution methods, and the overall scope of reference and information services have all been profoundly affected by the advent and growth of IT. The primary goal of libraries' reference and information departments in the past has been to facilitate patrons' use of the library's physical collection. The notion was broadened by online reference services, which now provide links to external references. After then, some websites started to offer complete back issues of certain periodicals for their users to peruse.
  - ❖ Communication between Library patrons and staff: In the past, patrons and librarians first communicated face-to-face to begin the reference or information service process. E-mailing the reference librarian with questions and receiving responses is quickly replacing more conventional methods of contact.
  - ❖ Sources cited: There has been a shift toward using full-text sources that compile essential documents or hybrid systems that mix bibliographic and full-text data. Internet services like message boards and online communities represent novel types of scholarly literature. Commercial services, which host the services across networks, are also available on the Internet, as are the free resources of individual libraries and the material supplied on home pages by individuals and groups.

One that is shared over the Internet One of the many Internet resources that might be used to ask a question and receive an answer is an online newspaper discussion forum. Articles on most news sites, including Usenet groups/Newsgroups, expire after seven to ten days to make room for fresh content. Because of its impermanence, a new and exciting type of writing emerged. Just as the name implies, a FAQ is a collection of the most important information discussed in a newsgroup, organised as questions and answers. As such, Usenet has to be considered and practised by reference librarians as an essential resource.

- **Interlibrary loan service:**

  Workstations linked to OCLC systems via the ILL module can automate ILL tasks, as can local or regional networks that supply online information about resources at other libraries. Web-based ILL requests and remote catalogue searching are on the rise. By using these methods, books and other materials can be located rapidly and sent from one library to another via facsimile.

- **Document Delivery Service:**

Libraries may now focus on a dominating format that is already familiar to the vast majority of their users and staff thanks to the World Wide Web's designation as both a delivery format and a gateway to resources in all other forms. We've temporarily stopped releasing new formats so that we may put our attention where it belongs: on the Internet. This has caused some significant and far-reaching shifts in the reference sections. These adjustments reflect a more settled approach to technology and point to a new level of comfort in the electronic reference tools of the twenty-first century. Reference librarians in the twenty-first century have grown accustomed to using digital tools and services as part of their daily routine.

➢ Networking of library services

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V. Conclusion

Although the latest breakthroughs in information technology are hard, even overwhelming, the actual issues that we face are not technical in origin. Instead, it will be necessary to conceptualize and implement change if we are to successfully adapt our cultural norms to the era of electronic and networked data.

The budget must take into account the pervasive nature of IT and the ongoing costs of maintaining a competitive edge. Otherwise, technology will become out of date, rendering systems and staff inefficient. Librarians here are especially concerned with maintaining the institution's reputation through the strategic application of cutting-edge information technology. Librarians must be careful not to get too far ahead of their patrons in the usage of information technologies. That's yet another foolproof method for driving away customers. Librarians shouldn't discount the impact of a shifting demographic on library services.

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