

Library Automation : Change for Productivity in Service

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ABSTRACT

Library operations, in the context of the automation necessitate for an integrated approach and change in the perception of library's work. It examines the functional aspects, social aspects and system dynamics of library automation. Some strategies for library automation are suggested.

1. INTRODUCTION

The introduction of any automated system is a challenge to the basic administrative skills of the librarians who must make the decisions, facilitate smooth implementation, and achieve maximum benefits from the capabilities of a computer-based system.

When a system is in operation, careful attention is necessary to ensure that procedures are fully adjusted for efficient use of available features, job design and work.

Enlisting the assistance of staff using the system to suggest alternatives in processing methods is one useful way of improving both operation and morale. The contribution of library and information professionals has to interface with the capabilities of software and hardware aspect of computer technology. With the emergence of micro computer—particularly the palm-top one—we should use a software

which needs little learning in switching over from manual operation to automation of library processes. The built-in operator friendliness is important. It should remove the technophobias and training phobia from the librarian's mind.

2. CHANGE IN PERCEPTION OF LIBRARY'S WORK

Library operations, in the context of the automation necessitate for an integrated approach. The trend of role-changes or role accretion in a library can be said to emphasise a librarian as a :

- Document collection builder, preserver and promoter of its use
- Content analyser of the text of documents and assigner of descriptors to information content of these text. Such descriptor assignments empower the potential searcher to browse, scan, link, focus, appraise and select relevant information from these text.

- Provider of access to in-house documents as well as from outside libraries; demand satisfaction as principal focus and there by demand generation for better utilisation of library resource are extended values.

All these objectives coexist to make a library function in an integrated manner.

3. FUNCTIONAL ASPECTS

Library automation is a phenomenon through which computer-based information processing is used in day-to-day operation of library systems and services. A large library works like a service industry, Library staff, particularly professional librarians have to consistently do their specialised work such as acquisition, technical processing, and delivery of documents and public services such as circulation, reference, retrieval, dissemination.

Many of a library's house keeping functions consists clerical repetitive work and a touch of professional activities. Libraries are generally understaffed. Many a time, the librarian gets lost in acquiring and organising documents. Consequently he finds less time for human aspects of library and information services. Library automation, particularly micro-computer operation releases energies of library professionals to the human aspects of librarianship.

Current rubicon of a library automation is an Online Public Access Catalogue, (OPAC). An OPAC is designed to do the following:

- To provide access to literature available in a library.
- To provide multi-point and multi-person access.
- To tell about what books have been lent and what are in the stock of a library.

One of the important aspects of OPAC is to have public access spread out to work stations of scholars, researchers, teachers, managers, decision-makers and others. Access terminals can be located adjacent to stack and office to dormitories and homes even. Printers can be provided to enable the users to make hard copies of their search results.

An OPAC provides access to data at every stage of processing and eventual circulation activity. The system modules are linked in recognition that the library is one complex, interrelated, inter connected, multi-faceted operation. The system-module component covers all aspects of house keeping such as acquisition periodicals management, circulation control, shelf-management, online catalogue, etc. These flow-in operation, cut away the ergonomic ducts, and reduce fatigue of the individuals in doing respective action. It can preserve the momentum of professionals to plan and act continuously. The task of creating and managing library automation towards providing bibliographic and physical access to end user demands vision and mission of activity at every stage. Computer-based technology has now enabled the document-technical process to be organised, and used for better productivity. The technical service librarians can act as system designers, providing requirement analysis to develop data-processing systems. This in-house framework for technical services would be constantly and progressively maintained in automated library processing. This would of course call for adoption of compatible standards for library-processing of documents. One of the benefits of these flexibilities is that it provides for an objective assessment of an individual's or a professional's performance. As a consequence the integrated approach in library automation, the staff in each library

have the functional responsibilities to meet the standards that are recognised beyond their own specialised areas of work. They are often exposed to end-users at remote access level, therefore, the quality-consciousness in the performance will bring them honour and professional pride. From the point of view of team work, this self-esteem will help in improving the overall performance of the library.

4. CONTROLS IN AUTOMATION

Library automation has to be consistent with standards and guidelines. Human performance inconsistency should be channelled and therefore, it is necessary to allow structural guidelines.

Individual professionals must have a clear sense of job identity, encouraging professionalism. It should guard against the potential of diffused work. However, the exchange of views and thoughts should be promoted among the professionals regarding specifications of the automation process to improve the quality of process and performance of services. This should be guarded against any loss of overall library objectives. Scheduling of work must be simpler and specific application time should not be wasted in solving problems of communication between professionals. Such good objective specification process would encourage development of specialists knowledge. An erosion of tight boundaries help in analysis and flexible performance of jobs.

5. SOCIAL ASPECTS

The social relationship in a changed system of library automation is to be valued. Crisp-decisions made to stale and creativity may be blocked or discharged. But continuing personel attention from library management would help to recognise individuals and teams creative buds of

change. Defining relationships in an organisational manual may be useful, but it must lead to professional tolerance to work towards mutual performance. Current approach to improvement of designs on job is linked to ultimate performance. The focus is to review the achievements in library service to end users. For example, a cataloguing professional would contribute inputs to OPAC, and at the same time as a manager he would contribute to the cost-effective use of computer applications in bibliographic record maintenance. He/she would also design the ergonomic benefits of the system-models from the user point of view as well as the staff point of view. This is in consonance with Ranganathan's law 'save the time of the reader' and save the time of the staff. The whole thing is arranged in the context of his fifth law 'library is a growing organism'. The current specifications of acquisition, technical processing, and services are likely to be merged in automation. But new socialism of end user analysis would lead to object-oriented services, such as the following:

| <i>Functional Specialism</i> | <i>Performance Analysis Specialism</i> |
|----------------------------------|---|
| The transaction | Response time |
| The enquiry response | time between failures |
| The output formats | Analytic and integrative feedback on services |
| The integrity of library systems | Adoptive process towards achievements |

6. SYSTEM DYNAMICS OF AUTOMATION

Library automation as a system-dynamic process incorporates changes and retains good performance to users. A structural base with overall mission can be used for

the purpose of keeping the professional-dynamics in automation. The adage from the *Dhammapada* "what we are today came from our thoughts of yesterday and present thought build our life tomorrow" tells us to be careful in utilising the human resource of the library.

This calls for human focus in social technical design. Professional adopters of library automation should explore the problem area thoroughly before any design work can be taken up. The performers of routine work are to be involved in the adoption process. They must adopt analytical techniques with data flow in all operations of a library. Focus should be built in all professional works in the flow of events by modelling the life of major processes, procedures and service-targets. Subsequent steps add in the deserved

motivation for functional results. It should be object-oriented and event-oriented analysis.

Some strategies for library automation are suggested below:

- Reduce the number of organisation leads
- Create a matrix organisational structure
- Change the unit size diameter (smaller)
- Tap creative talents on the job
- Encourage achievements
- Always keep the achievement alive
- Share the total impact of efforts of the team
- Always be innovative.

The human factor provides a socio-dynamics to library automation.