

**Review Article** 

# Building Strong Operational Control Techniques for Library and Information Centers—A Review

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# ABSTRACT

This paper underscores the critical need for Operational Control Techniques to thrive in today's technology-driven landscape. To excel in this area, it is crucial to embrace change, foster collaboration, and build trust. Control Techniques play a vital role both within external organizations and among the staff of an institution. This document focuses on several key 'Library Automation, Financial Management, Total Quality Management, Management Information Systems, Program Evaluation and Review Techniques/Critical Path Method (PERT/CPM)' fundamental control techniques applicable at various levels within a Library & Information Center.

**Keywords:** Control Techniques, Library Operations, Library Automation, Financial Management, Total Quality Management, Management Information Systems, Program Evaluation and Review Techniques/Critical Path Method (PERT/CPM)

#### Introduction

While some individuals seem to have no worries and yet lack the drive to pursue their ambitions, we believe that maintaining an appropriate balance of control over one's life is essential for happiness. The concepts of power, control, and resistance are fundamental to the functioning of organizations. In every aspect of human existence, from social to economic, health to research, there are established systems. Imitating blindly, engaging in superficial competition, or valuing status symbols are ineffective strategies. Libraries serve as examples of such systems, managing vast amounts of information and knowledge. They are indispensable. Libraries operate on extensive platforms and require structured methods, known as techniques, to manage their operations effectively. This, in turn, allows libraries and information centers to fulfil their goals and objectives.

Library management can be described as "The daily activities and strategies aimed at reducing interruptions to library

services by getting ready for events like construction, updates in technology, mergers, inventory checks, or emergencies." Management strategies refer to "Methods that equip professionals with the necessary information to assess and oversee performance. This information must be customized to fit the needs of different management levels, departments, units, or operations." Operational management involves the power to direct and control the activities of lower-level units, which includes organizing and utilizing resources, assigning duties, setting goals, and providing the necessary guidance to achieve the mission. Library management encompasses the regular activities related to obtaining, organizing, and maintaining library materials for their optimal use.

Daily procedures for running a library are included, along with tips for minimising service interruptions from planned events like renovations, technological upgrades, and inventory checks. The arrangement and management of housekeeping duties determine how well libraries and information centres perform. One of the most fundamental



duties of any library is housekeeping. The operational subsystem of libraries includes the housekeeping duties of obtaining, processing, and conserving library records, as well as maintaining the circulation and supply of the library. These tasks are carried out by the acquisition, processing, serial control, and maintenance sections of libraries. These are library classics that are recurrent. Automation will reduce the need for human labour in libraries and information centres, regulate monotonous jobs, redefine library services, and equip employees to multitask.

# Objectives of the study

- To know/understand control techniques through review.
- 2. To explore different operational control techniques applicable at various levels within a Library & Information Center.

# **Need of the study**

The following study topic is based on the researcher's professional background. As a researcher, she believed that in order to give readers the greatest services possible, best library practices might be developed and implemented in libraries and information centres using operation control approaches. Operation control is essential for the efficient use and allocation of resources, reducing waste and maximising the use of scarce resources. In non-profit organisations, the relationship between expenses and benefits is less clear-cut. They require a lot of personnel or labour.

For libraries and information centres to successfully and efficiently meet the goals established in the planning function, operation control is very essential. The goal of operation control is to ensure that things go according to plan. The management of libraries and information centres makes a systematic effort to assess if performance is in compliance with standards and to take necessary corrective action by comparing performance to preset standards, goals, or objectives. An essential component of library administration is operation control. Establishing performance benchmarks, gauging performance, comparing actual performance to benchmarks, analysing discrepancies, and implementing remedial measures are all part of operation control. Libraries and information centres cannot prosper without control. Operational control methods contribute to continuous quality improvement and highquality performance.

The cost of materials is rising, budgets are getting smaller, and libraries today want to utilise all of the resources at their disposal. The demand for information has increased due to modern computer and communication technologies, and patrons now expect high-quality library resources

available whenever and wherever they are needed. Public and private libraries must offer these services as effectively and efficiently as they can. OCT assists librarians in meeting user expectations, making quick decisions, evaluating services, and achieving higher quality.

#### **Review of Literature**

Mohd Imtiaz Ahmed (2009) Management Information System in Libraries, having particular relevance to Chhattisgarh University Libraries. Automation of MIS has become essential. The goal of this study was to improve the effectiveness, measurability, and improvability of library operations. It emphasised the ongoing importance of the library's efficacy. Manpower can be saved, hence library management should use MIS as one of many strategies to enhance the planning and management process within libraries rather than as a crutch or replacement for the delicate human art of management.<sup>1</sup>

Babalhavaeji, F. (2010), tried to find out which criteria significantly affect the quality of work in academic libraries; to identify criteria that appear to be useful in evaluating the quality of ITBS in academic libraries; and use these criteria to develop an instrument or assessment checklist to assess the quality of ITBS in academic libraries. Key questions were identified, categorized and discussed to produce the proposed assessment list. Results Several indicators were developed and tested in the quality assessment studies discussed in the document. The literature suggests that ITBS assessment in academic libraries should be addressed more.<sup>2</sup>

Dash, Nrusingh (2010). This study deals with the process of quality assessment in modern libraries and information systems 'Evaluation of the quality of libraries'. Service quality is seen as a comparison with what the customer expected before using the services and with what is the perceived level of the services. Service quality and user satisfaction are two important aspects of effective service management. Measuring service quality as a management technique has become important in service industries in recent decades, and libraries are no exception. Stakeholders and users have different perceptions of library quality, because they judge library quality based on the experiences they have with the services. Several approaches have been used to quantify the quality of library services.<sup>3</sup>

Govda, Saroja (1999), began to investigate the implementation of TQM in the provision of library and information services in open universities in India. Open Universities in India are succeeding in building a reputation for quality education to distance learners. DEC, India's apex organization for open and distance education, had launched several projects to ensure quality in higher education through distance education.<sup>4</sup>

Kemdarne, Suryakant (2012) Studied library automation and networking in dental college libraries affiliated to Rajiv Gandhi University of Health Sciences, Bangalore. The main and actual goal (objective) of the research is to investigate the various barriers to automation and networking of dental libraries and to provide a feasible and cost-effective solution to eliminate these barriers and enable the provision of standard and high-quality services. libraries to the user community.<sup>5</sup>

Mohd., Imran Ahmad (2013) A comparative analysis of the cost-benefit and cost-effectiveness of operating expenses in the university libraries of AMU Aligarh, DU Delhi, and JNU Delhi. The study's main conclusions can be summed up as follows: central universities have a sizable student body and automated operating infrastructure, including OPAC, the internet, and e-journals.<sup>6</sup>

Muralikrishna, C. (1997) Study revealed that Andhra Pradesh University Libraries do not have separate manuals, codes, procedures and practices etc. for human resource planning systems. Most decisions related to personnel planning are made through codes, rules, regulations framed by U G C from time to time.<sup>7</sup>

Prempeh, K. (2015). The study shows Evaluation, that compliance with financial controls affects the effectiveness and efficiency of managing the financial resources of the community. Financial control involves the human activity of highlighting potential processing or valuation errors. Internal control can also be bypassed by collusion between employees or coercion by superiors or management. Therefore, management must ensure that the Committee of Sponsoring Organizations (COSO) stronger, which consists of five interrelated parts, namely control environment, risk assessment, control activities, information and communication and monitoring, is well grounded organization.<sup>8</sup>

Sinha, Anuradha (2013). Studied information storage and retrieval techniques in Delhi Digital University Libraries DU, IGNOU and JMU case study. Information storage and retrieval techniques in digital university libraries. The purpose of this study was to investigate the data storage and retrieval techniques offered by database providers and user expectations and feedback.<sup>9</sup>

Sukumaran, C. (2012), A study on budget allocations for books and journals and acquisition policy in Kerala universities. Research on university libraries, especially fiscal aspects, is scarce in India. A pioneering effort is being made in this field in Kerala. The financial situation of the university libraries in Kerala is no different from the national average. Considering all the above factors, the researcher tries to find out the Kerala, Calicut and M.G. University Libraries in the course of study of budget allocations and acquisition

policies for books and periodicals in Kerala universities.<sup>10</sup>

Vijaykumar, K.P. (2016). Assessment of Manpower Utilization in Kerala University Libraries. In fact, the automation of libraries requires a reorientation or restructuring of services, which leads to a reorganization of the organizational structure of libraries. A careful study of the organizational structure of universities in Great Britain, the United States and almost all developed countries would demonstrate this well. But no such reorganization took place in Kerala. This restructuring requires changes in the number of employees, qualifications, skills and hierarchy. Rapid changes in the information scenario require regular review and updating of the strategic plans of university libraries and a constant change of priorities. This in turn changes the workflow and forces library staff to take on new and additional tasks and responsibilities.<sup>11</sup>

Acquisition, serial control, cataloguing, circulation, online public access catalogue, services, and inventory taking are among the housekeeping tasks that can be automated in libraries. Function Control regions, the distribution of resources, leadership and management oversight, long-term planning, publicity and advertising services for libraries, promoting the use of libraries, spending money on brand-new amenities and services sources for stationery and printing, Technical Processing Section, Loans Out, Circulation Eliminating policies, Planning for manpower, the information services sector, creation of databanks.

#### **Control**

Any organization's planning approach will be ineffective without control. Finding operational flaws and addressing them are the goals of control. Measuring the effectiveness of planned activities and taking corrective action if necessary are beneficial. Determining what needs to be done and managing concerns to ensure that it is done are the two aspects of planning. Corrective action taken once the actual performance technique is established is referred to as controlling. The implementation of standards, performance evaluation, and deviation correction are examples of control measures. Budgets, statistical information, internal audits, and human observation are a few examples of conventional control methods. PERT/CPM is another for enhancing quality. Sometimes malfunction likely to happen while exercising control. Devising effective control technique for Library & Information Centers is difficult because they are not for profit but service in nature, in the absence of realistic, objective and precise standards for measuring performance at users expectations. Technology and operational strategies are what make an organisation successful. Controls must be based on plans and have clearly defined organisational goals and objectives.

# Operational Control techniques for Library & Information Centers

#### **Library Automation**

'A process of mechanising library operations which are of routine and repetitive nature' is a simple definition of library automation. Library automation is the term used to describe the preponderance of computerization in the housekeeping operations of libraries. The most advanced electrical instrument created by humans is the computer, which can quickly, accurately, and reliably turn vast amounts of raw data into meaningful and usable forms of information. The technologies utilised for information gathering, processing, storing, retrieval, distribution, and transmission at the local, regional, and global levels are currently referred to as library automation. Effective library automation and services can be greatly aided by library automation, as it guarantees the management of-

- An increase in collection control.
- Robust command over the whole process.
- Both the addition of new services and the enhancement of current ones.
- Effective resource sharing amongst the several libraries in an area.
- · Preserving consistency in tasks and
- Utilising the expertise of current employees.

#### **Financial control**

It is a management system and control technique. A budget is a tool for tracking progress, identifying significant deviations from the plan, and indicating when corrective action is required to get operations back on track. No one is given money if their requests are not justified. To regulate expenditure, there should be a final restriction. There can be abrupt drops or climbs that require technical regulation. How far Library & Information Centers have achieved (conformed) budgeted programme, will be known only after completion of the budget period. A budget is a scheduled summary of revenue and expenses. It also refers to what is scheduled and completed within a given time frame. It is a control device from the future. It involves regularly assessing the level of development and contrasting it with time elapsed and cost standards. With this context in mind, library professionals can modify how libraries and information centres operate.

#### **Total Quality Management**

The Fourth Law of Library Science Principle by Dr. S.R. Ranganathan TQM and reader time conservation go hand in hand. The field of quality management is dynamic. It is dynamic and always changing to adapt to new circumstances. The ISO 900 series of standards is a collection of written guidelines that establishes a quality system, documents the fundamental components of the system, builds a quality

system based on customer requirements, and emphasises the process with the assumption that a quality process leads to a quality system. Total Quality Management prioritises client satisfaction, assignment delegation, participation of employees at all levels, Improvement through continuous process as opposed to function. Improved product design, inventory management, database development for all kinds of material, decreased user compliance, efficient use of labour and equipment, material result in higher productivity, tension-free environment that fosters positive relationships between staff and users, and team building are all aided by total quality management for libraries and information centres.

### **Management Information System**

The term 'Management Information System' refers to a grouping of hardware, software, processes, and personnel that work together to integrate organisational subsystems and provide information for planning and controlling internal operations. It also filters, organises, and chooses data and presents it to managers in an informational manner, giving managers the ability to create information as needed. The ideal method for getting timely and pertinent information to support management decisions is the management information system. Librarians can make decisions more easily by using management information systems to plan and control processes, evaluate the performance of various groups and individuals, and provide reports.

# Program (Project) Evaluation and Review Technique/ Critical Path Method (PERT/CPM)

PERT, a statistical tool used in project management to analyse and describe the tasks involved in completing a specific project, is utilised as a control strategy for libraries and information centres. This method helps to coordinate several tasks, minimises delays, and lowers intervene-tions and conflicts. Programme (Project) Evaluation and Review Technique/Critical Path Method (PERT/CPM) control can be used by librarians for significant repairs, equipment upkeep, moving to a new building, implementing new services, and adopting altered categorization schemes.

#### Conclusion

Because operational control approaches are beneficial and supportive of the overall administration of libraries and information centres, the investigators have proposed pedagogical implications for this study summary in the context of libraries. They provide support for research, teaching, learning, extracurricular activities, and curriculum. After new arrivals, librarians can notify users about these documents and information via SMS, email, and notice boards with banners and posters at various locations, all while adhering to the cost-benefit strategy. As a result, users can approach and consult documents, reducing the number

of ineffective student visits. This would greatly reduce costs for library workers. In order to optimise productivity and optimise capital allocation, the technical section may operate in the following manner. Libraries might schedule workshops, conferences, training sessions, and seminars on a regular basis to guarantee an effective system in the area. Hiring experts to instruct staff members on the newest ideas and technologies and how to use them will alter the technical section's operating pattern.

Using budgetary control techniques can save costs in the periodical section. Libraries can join consortiums to work with organisations such as INFLIBNET to provide highquality scholarly content. Therefore, spending on that item again would be avoided. Work can be done with manpower that is diverted. Every library should have a professional reference librarian in the reference department to draw in customers and swiftly satiate their curiosity. Libraries can quickly address questions by consulting subject matter experts. The reference section would be heavily utilised as a result of this deployment, which would lower costs and enable the provision of high-quality services. In order to exchange academic materials produced by researchers and teachers, libraries might collaborate to create institutional repositories. The management of the library has the authority to mandate that students visit the building and set aside specific times to complete homework and research. Students will return more frequently as a result, and they will gain a thorough understanding of the materials available and how to use them.

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