FROM THEFT TO CYBER ATTACKS: COMPREHENSIVE SECURITY MEASURES FOR LIBRARIES

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INTRODUCTION

Libraries are treasuries of knowledge, systematically preserving diverse information resources for present use and future generations. They serve as centers of civilization, archiving rare and historical documents. As libraries hold sensitive data digitally, they face new challenges in preserving cultural heritage and ensuring data confidentiality and privacy (Kont, 2024). Both physical and virtual libraries are accessible to all user communities, but this openness brings security issues. Libraries and their users' data can be accessed and used by unauthorized third parties, and information systems are vulnerable to virus attacks, data blocking, database misuse, and breaches (Igbinovia & Ishola, 2023). Losing a single copy of a rare document can severely affect the library or the country. Thus, libraries take the protection of rare collections and patron data profiles seriously.

Libraries must ensure the safety and security of their overall environment, including collections, property, and patrons' data profiles. This environment should ensure the safety of library staff and visitors (Ceccato et al., 2023). Safety and security measures allow users to focus on their studies without worrying about personal belongings or digital devices. While human behaviour changes cannot be measured by facial observation, adequate security measures protect valuable assets and ensure safety. Library staff must actively protect both the physical and digital environments to detect illegal activities anytime, anywhere. Technology has aided in surveilling theft, significantly supporting librarians in protecting library property. Library and information science professionals must understand the types of illegal activities, safety measures, policies, regulations for punishing unethical behaviors, and potential challenges in ensuring safety. This chapter comprehensively covers these topics, providing valuable insights for librarians and concerned bodies.

EVOLUTION OF SECURITY MEASURES IN LIBRARIES

The evolution of libraries parallels human civilization. Historically, emperors safeguarded valuable information, considering libraries as national treasures. This often led to rulers attacking and looting each other's state libraries, establishing the early concept of library security. Initially, security focused on protecting physical materials, employing traditional methods and library guards to secure manuscripts.

In the medieval period, monastic libraries became prominent centers of learning. To enhance security, books were chained to desks. The 15th century saw the advent of paper and the printing press, facilitating rapid document reproduction and expanding collections. This period required more sophisticated security measures beyond guards and chains. Libraries began using ledger systems to track check-ins and check-outs, and librarians were employed to oversee collections.

The 19th century marked the spread of public libraries, which introduced library cards for borrowing documents. This system tracked due dates but also increased security challenges. Card systems deterred theft, while locks and alarms protected physical items from vandalism.

In the 20th century, technological advancements revolutionized library security. Electromagnetic cards embedded in documents and sensor gates at exits tracked unissued items. Many libraries still use this system