

# Security of Library Materials: Traditional and Electronic Security Measures

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**Abstract:** *The rapid growth of literature or information in the present age leads to information overload which becomes quite difficult for the library professionals to manage overall security of the library materials. The present paper discusses about various security issues like theft, vandalism, unauthorized access and many more which eventually occur in most of the libraries. The paper includes different types of materials available in libraries, need of library security, security issues and various security systems adopted in libraries including both traditional and electronic security measures. The study will be helpful in securing the library materials and making users aware of the consequences of any misbehavior.*

**Keywords:** Library security and need, security issues, types of Library materials, traditional security measures, electronic security measures

## 1. Introduction

Library is a store house of knowledge it is a place where all the worldly information is being kept in both printed and non-printed form. We are living in the information age which plays an important role in enhancing people intellectually, economically, socially, culturally and keeps the citizens well informed and helps explore more ideas in their respective field of interest or to exercise their right as citizens of a democracy country. The main aim of every library is to serve knowledge to people and fulfill their intellectual needs despite of any caste, gender, racial discrimination. In our nation no other system like library provides such a precious thing as knowledge at cost of nothing Library Services can only be achieved through availability of library collections. Therefore, it is User/patron's duty also to respect the rules and regulation of the library and its resources.

Nowadays, information is growing with time along with people's need for information, new innovations, new ideas whether to cop up with the trend or for research work. Being information is a powerful asset everyone is competing around to be on a step forward than the others.

## 2. Security of Library Materials

When an important most often used document/information is found missing or in a critical condition then it restricts its future use and denies the borrower from the pleasure of its reading. At that point the Librarian fails to fulfill that patron's need. It is a prime responsibility to secure valuable library resources from being harmed, for that there will be needing certain accurate security measures to secure the library resources. There are different types of people in the world with different intentions, protecting the library documents, staff, users, reading rooms and workflow are the most important areas of the library security system. Theft of library materials is a common problem of faced by every library and other security problems like vandalism, unauthorized access, misplacing of books, theft of personal belongings like purse, mobile, bags etc, also takes place. Therefore, it is necessary for the librarian to take certain steps to prevent such unfruitful actions from being done. The looting of the great

Alexandria library by soldiers of the prophet in the seventh century is the first recorded example (Maidabino and Zainab, 2011). Ajegbomogun (2004) opined that collection security refers to a process designed to protect library collections against un-authorized removal or loss. This involves protecting resources against disasters as well as thieves or intruders. Information security governance is the manner in which information security is deployed. Collection security management in libraries can be conceptualized to mean the overall manner in which collection security policies, programs, procedures, or measures are deployed to mitigate risk and ensure access.

## 3. Need of Security in Library

Security threat in library is an age old and universal problem, every passing year a library tends to lose a large number of valuable documents or information due to inadequate security measures and user's unethical practices. This area has been recognized due to increasing number of security issues that takes place in libraries and to find some measures to lessen the issues, loss of a single resource can cause a great loss because a library may not have the ability to have another or that particular resource may be available in the stock. The emergence of ICT (Information and Communication Technology) has led development of various contemporary systems for security purpose. Although, in India most of the library is not fully-automated, may be due lack of insufficient budget the library professionals can only spent the money on collection development and their maintenance. Therefore, those library remains left out from implementing the advanced technologies to protect its valuable resources effectively. But there still some libraries, who have successfully implemented modern technologies like RFID (Radio Frequency Identification), Biometrics, automated self-checkout, return system etc.

## 4. Types of Resources

A library is a collection of various types of materials starting from primary to tertiary sources of information such as:

1. **Books:** Books are a source of secondary information. Library stores different types of books. Some libraries carry special collection of rare books, manuscripts and maps.
2. **Manuscripts:** A manuscript is piece of handwritten document which is not printed
3. **Journal:** A journal is a scholarly publication which contains articles written by researchers, professors and other experts covering specific subjects.
4. **E-book:** E-books are types of books that are available in digital platform.
5. **Magazine:** A magazine is type of printed form that consists of articles, stories, poems, images and paintings published periodically. A magazine helps people to be aware of recent happenings around.
6. **Dissertation/theses:** A thesis is a primary source of information. A dissertation is a piece research scholar's research and findings work during their post-graduation preserved by academic libraries.
7. **Newspaper:** Newspaper enables to acquire current information about local national and International events.
8. **Movie:** Library may carry DVDs (Digital Versatile Disc) or CDs (Compact Disc) for Entertainment and education.
9. **Database:** A database is a collection of organized form of data generally stored and access electronically. A library database is very helpful to the users which provide updated and accurate information by the experts and professionals. Example: e-books, e-journals, magazines etc.

## 5. Types of Security Issues in Library

- **Theft:** Theft is the most common problem almost faced by every library whether theft of library materials like textbooks, cassettes, other items of user's and staff's personal belongings and computer equipments. Theft of books or other resources in libraries is a common problem that requires a serious attention from library professionals in particular and other stakeholders generally. It is unfair to disfigure library materials thereby denying others the opportunity of using such materials. Mutilation is carried out by lazy, uncultured users for their selfish ends.
- **Vandalism:** When a person willingly destroys or cause damage to public property is called as vandalism. This leads to breaking of library rules and this type of issue occurs due lack of recommended books, restrictions of using library materials, etc.
- **Mutilation:** Goswami (1989) suggested that 'mutilated' refers to any act that makes material unfit for reading either partially or completely. Mutilation means causing serious damage to library materials underlining text, tearing or removing pages, highlight the content, cutting pages, hiding of books etc. This type mutilation can be done to the library materials due to the lack of security means in the library.

Atwood and Wall (1990) conducted a periodical mutilation survey that led them to recommend several actions to cut down on the behaviour. These included: (1) Providing copy and change machines; (2) Making adequate closing announcements; (3) Replacing

mutilated items when possible; (4) Continuing high quality serials management; (5) Displaying signs that explain mutilation is a crime; (6) Purchasing more microform copies; (7) Educating staff; and (8) Patrolling the library. '

- **Damage and Disaster:** "Disasters can be natural as well as man-made. There is little or no control over natural disasters, which come usually as a result of the flood, landslides, earthquake, storm, cyclone, or hurricane" (Aziagba & Edet, 2008).
- **Non-return of the library resources:** When a patron borrows books from the library and does not return on due date, then it disturbs the circulation process and other users who are willing to borrow that book. This type of deeds prevents the innocent patrons from issuing the required materials on the needed time.
- **Unauthorized Access:** It is an act of cyber crime where someone tries to enter to a computer system or application without due permission of the owner which can violate the owner's privacy such as hacking, virus, cyber security etc.
- **Mis-shelving of materials:** This kind of problems can appear due to the following reasons, lack of staff vigilance, when a patron hide a book in some other shelf so that no one can issue that book or due to laziness they kept the book anywhere instead of the right place in the shelf or can be done intentionally for fun.

## 6. Causes of Security Issues

There can be various possible causes which results in breaking of library rules and causing harm to its resources such as higher cost or lack of photocopying service, laziness of user, lack of staff vigilance, lack of security awareness, grievances over library staff or poverty etc.

Pradhan and Bhoi (2015) mentioned certain causes of security issues that often occur in libraries: 6

- Dissatisfaction about library staff
- Natural disaster
- Cost of learning material
- Insufficiency of library materials
- Indiscipline
- Selfish nature
- Loss of library card

## 7. Traditional Security Measures

1. **Building Design:** The design of the building should be built keeping in view of all the possible security to the library.
2. **Library policy:** A policy is a set of written instruction or guidelines to achieve its goals and objectives. Every library should have written policy for the smooth functioning of the library.
3. **Security Guard:** Security guard should be available in the library with well trained and active in nature to maintain peaceful environment in library.
4. **Security Awareness:** In every library there should create an awareness programs by the librarian or library staffs regarding the rules, regulation, security of library

resources and infrastructures and the consequences of breaking any kind of rule so that the patrons think twice before doing any unethical practices.

5. **Window Security:** Ferdinand, Patrick and Nneka (2015) stated there are many types of window security including locks, guards, grilles, bars, screens, and films. Window locks should be fitted to all windows that can open and are accessible without the means of a ladder. For best control, these windows should be secured by key-operated locks.
6. **Fire Extinguisher:** A fire extinguisher is an active device which is used to control small fire or smog when there arises any emergency situation.
7. **Id-card:** Before entering the library id-card must be there with the patron for identification of the right patron.

## 8. Electronic Security Measures

By emerging of various technologies has helped libraries in various ways to keep an eye on the library materials, to give alerting signal whenever some unethical situation occurs and it also helps to identify the right user in the library. Talwar (2016) analyses library resources security issues with solution and various security measures such as Biometrics, Backups (to make duplicate copies of files) Antivirus Software, Firewall, Burglar Alarm, Radio Frequency Identification (RFID), Closed Circuit Television (CCTV), Electro-Magnetic Surveillance System (ESS), Lockers Protection, Auditing of Library, here some electronic measures are as follows:

1. **Biometric:** Biometric is a technology which provides automatic and instant verification of unique physical characteristics of humans like fingerprints, eye-retina and irises, facial patterns, etc of an individual or behavior characteristics like signature etc. It is used in libraries for identification and access control of patrons.
2. **Barcode:** It is a technology with which is an optical machine-readable representation of data invented by Norman Joseph Woodland and Bernard silver. Barcode is labels with vertical bars that are pasted on any item available in the library and can be read with an optical barcode scanner. A barcode carries data about the details of materials used in circulation section and identification and inventory control to prevent theft issues.
3. **CCTV:** Lavanya (2017) Closed-Circuit TV (CCTV), additionally considered as video surveillance is the use of video cameras to transmit a signal to a particular place, on a limited set of monitors. CCTV helps in monitoring the users.
4. **RFID:** RFID (Radio Frequency Identification) is a technology that incorporates with the use of radio-waves to track or identify objects or people which comprises of tags and readers. Reader is a device which comprises of antennas that transmits radio waves and receives a signal back from the tag attached on items or books. So, this technology is very helpful for detecting its materials from being theft used in circulation section in library. Most of the libraries in India fail to adopt RFID due to limited budget.

5. **3M Exit Detection:** This technology provides an efficient protection in the library which consists of Tattle-tapes security strips. This technology is adopted in the doors or windows for identification purpose mostly used in banks or shopping malls which detects people while coming in and out.
6. **Smart card:** A smart card is a memory device, credit card like structure with an integrated chip on it which allows means of securely storing of data. It works by inserting in a reader.
7. **Burglary protection:** Gupta and Margam (2018) Burglar alarm contains an electric circuit connected into an entryway, with a switch that opens or closes the circuit. The switch detects any act of intrusion which might include opening/closing a window and/or door. This kind of alarm is built into an entryway.
8. **Antivirus Software:** Nowadays various types of antivirus software are available in the market whether free or paid whichever is applicable for securing the data from being attacked by virus. Some of the antivirus software are Kaspersky, Quick heal, McAfee etc.
9. **Backup:** Data should be backup on due time, information should be copy to a system's hard drive and another location which is secure and durable.

## 9. Conclusion

Security challenges are a major problem faced by almost every library in the world. In library various types of users visit who belongs to different fields from student to research scholars, faculty members to staffs. The tremendous growth of information has led to difficulty for the librarian to protect the enormous information. It is quite difficult for the librarian to manage such a huge amount of information and to serve various users from a student to staffs. Keeping the library resources secure safe is the responsibility of each and everyone in the library, from staff to the patron as mutilated or stolen items in the library are difficult to replace because a library may not have much fund to buy another one or that particular stolen piece may not be available in the market. Nowadays, people are getting quite smart, so various kinds of security breaches seems to be occur, in that case traditional measures are seems to be less effective than the electronic measures. By application of electronic measures helps to identify and keep the materials safe, which reduces some burden of the librarian. But in India most of the libraries fails to implement the digital measures due to limited budget.

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