

Vol 2 Issue 9 Oct 2012

ISSN No : 2230-7850

---

International Multidisciplinary  
Research Journal

*Indian Streams  
Research Journal*

Executive Editor  
Ashok Yakkaldevi

Editor-in-Chief  
H.N.Jagtap

---

## Welcome to ISRJ

**RNI MAHMUL/2011/38595**

**ISSN No.2230-7850**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Janaki Sinnasamy Librarian, University of Malaya	Catalina Neculai University of Coventry, UK	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Horia Patrascu Spiru Haret University, Bucharest,Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea,Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences AL. I. Cuza University, Iasi	.....More

### Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India  
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net**



## Security and Surveillance for Collection in Modern Libraries

**Balwan Singh**

Assistant Librarian, Nehru Library,  
CCS Haryana Agricultural University, Hisar

### Abstract:

*The present article describes about the importance of collection security. It also discusses various security and surveillance equipments such as CCTV, RFID, Entrance Security Gates, ID Card Readers, Biometric Time and Attendance Machines with suitable illustrations.*

### KEYWORDS:

Modern Libraries , Surveillance , libraries across , strengthen.

### INTRODUCTION :

Almost all the university libraries across the world follow Open Access System. In an Open Access System, the users are free to visit the stack areas to browse the reading material. So they are free to lay hands on treasures of knowledge from ever since. Importance of library depends on the collection of reading materials, its type and users of this collection. The reading material in such a System is exposed to risks of mutilation and theft. In most of the libraries, security is monitored through library staff. Despite vigilance, the reading material is mutilated and smuggled out of the library by some undesirable elements. There is a need to strengthen the library security through the use of modern equipments such as Closed Circuit Television (CCTV), Radio Frequency Identification (RFID), Electronic Security Gates, Identity Card Readers, Biometric Time and Attendance Machines, etc. to check on readers from the theft, crime and such other unsocial activities.

### COLLECTION SECURITY

Security of collection is a big threat. Ajegbomogun (2004) has described about that the collection process and said 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. In the same way Maidabino (2010) states that libraries must be safe from security threats and vulnerability. University library collections are broad and varied. University libraries support the educational community through access to the collections. Borrowing privileges is an important means of giving access to library collections for personal, educational, and socio-economic advancement.

### CLOSED CIRCUIT TELEVISION (CCTV)

Closed Circuit Television (CCTV) is being installed in libraries for the collection security and surveillance. Closed Circuit TV system consists of installation of cameras at various locations in the library. TVs are located at multiple places. Each of these locations is manned by the library staff who will keep continuous watch on the visitors, particularly in stack areas. This system will reduce the incidents of mutilation and thefts drastically. Such a system is an essential requirement in the modern libraries.

According to Wikipedia, Closed-circuit television (CCTV) is the use of video cameras to transmit

Please cite this Article as : Balwan Singh, Security and Surveillance for Collection in Modern Libraries : Indian Streams Research Journal (Oct. ; 2012)

a signal to a specific place, on a limited set of monitors. It differs from broadcast television in that the signal is not openly transmitted, though it may employ point to point (P2P), point to multipoint, or mesh wireless links. Though almost all video cameras fit this definition, the term is most often applied to those used for surveillance in areas that may need monitoring such as banks, casinos, airports, military installations, and convenience stores.



4 Channel indoor video surveillance system

#### Electronic Security Gates

The Electronic Security Gate is installed at the Exit point of the library. A thin magnetic strip is applied to all the books on the inner side of their spines. This strip is magnetized at the time of checking-out and demagnetized at the time of checking-in. If a book is smuggled out of library without the process of magnetization and demagnetization, the Electronic Gate will sound an alarm, alerting the staff manning the Security Counter.



#### MULTIPLE SECURITY GATES

##### Radio Frequency Identification (RFID) Technology

Radio frequency identification (RFID) technology surveillance system that promises to relieve repetitive strain injury, and improving safety, security, productivity, accuracy and convenience for communities is working in various sectors. This Dedicated short-range communication (DSRC) system has been used in library for multiple purposes; such as automatic identification, tracking and management of material flow. It has also provided an additional advantage to Bar-code technology.

Radio Frequency Identification (RFID) - a flexible technology, was predicted to be one of the most convenient and well-suited automatic identification surveillance systems since 1980s. This system has gained popularity in recent past. This new technology is quite inevitable to library, both for financial and human reasons. In this country, library security has always been a key issue; such as material security, personal safety, personal comfort, financial liability, legal issues and problem patrons. The introduction of RFID technology brings notably a solution to minimize such problem. This system is claimed to be one of the major time saving automatic identification and data capture (AIDC) technique, which replace barcode and EM system in recent year. To a library, RFID is an item tagging technology with profound societal implications that collects, uses, stores and broadcast data for providing a safe hand and cost effective solution to the above-mentioned key issues facing most libraries these day.

RFID is an acronym for radio frequency identification. Briefly the RF stand for “radio-frequency” and ID means “identifier” that allows an item, for instance a library book, to be identified, accessed, stored, reprogrammed and communicated by using radio waves. This technology is similar in concept to a cell-phone or “ATM-card” that is used in transaction of money. In library context, RFID works by placing a 2”x 2” inch tag (made up of microchip with an antenna) in each library items. These items are needed to personalize through RFID-personalizer and read the tag during circulation process. Meaning, when library staff place items to be checked-out or checked-in, items are placed on RFID-personalizer, which read by identifying tag's antenna. The antenna enables the chip to transmit the information to the reader, and then the reader convert RF waves reflected back from the RFID tag into digital information. That can be passed onto PC and make use of it. This process is very easy, saving time and energy, and simplifying up-to-date inventory tasks in libraries.

It should be implemented in a phased manner depending upon the availability of funds. In the first instance, very costly and pictorial books can be magnetized. In the 2nd phase some other reading material can be magnetized and process will continue until all the books are magnetized



#### **LIBRARY/IDENTITY CARD READER**

Readers are provided with Library/Identity Cards to enter in the library premises and then to use the library resources within the library and for borrowing the reading materials.

A card reader is a data input device that reads data from a card-shaped storage medium. The first were punched card readers, which read the paper or cardboard punched cards that were used during the first several decades of the computer industry to store information and programs for computer systems. Modern card readers are electronic devices that can read plastic cards embedded with either a barcode, magnetic strip, computer chip or another storage medium.

ID Card Reader can be installed at the entrance gate so that only those readers having valid ID card can get enter in the library through this process.



ID Card Reader

#### Biometric Time and Attendance Machine

Attendance machines help in automation of attendance of the employees and can help in tracking the in and out time of employees. Through these machines we can also manage employees in multiple locations from a single location using auto-push technology.



Fingerprint Based Time and Attendance Machine

#### CONCLUSION

A sound Collection of library reading materials is must in the libraries. Security of this collection of reading becomes more important when there are chances of theft and mutilation due the poor psychology of the readers. Therefore there is a need to educate the users on the devastating effect of theft and mutilation of library materials on the stocking and services of the library. It will be advisable that multiple copies of education books and any other heavily used materials should be purchased. Security and surveillance equipments should be installed in the libraries so that there would be psychological and social pressure on the users for not being indulged in the activities of theft and mutilation and any harm to electronic and other such materials. At the same time penalties for theft and mutilation should be well publicized and consistently be applied in the libraries.

#### REFERENCES

1. Ajegbomogun, ( F O). 2004). Users' assessment of Library Security: A Nigerian University case Study. Library management. 25(8/9), 386-90
2. <http://ampletrails.com/biometric-time-and-attendance-machine>
3. <http://ampletrails.com/biometric-time-and-attendance-machine>
4. [http://en.wikipedia.org/wiki/Closed-circuit\\_television](http://en.wikipedia.org/wiki/Closed-circuit_television)
5. <http://www.barcodeman.com/altek/asr2600/>
6. <http://www.d.umn.edu/lib/tech/security-gate.htm>
7. <http://www.libbest.com/rfid.html>

**Security and Surveillance for Collection in Modern Libraries**



8.Maidabino (Abass Aktiku). 2010. Collection Security Issues in Malaysian Academic Libraries: An Exploratory Survey. Library Philosophy and Practice.  
[<http://www.webpages.uidaho.edu/~mbolin/maidabino-ngah.htm> ]

## Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

### Associated and Indexed, India

- ✍ International Scientific Journal Consortium
- ✍ OPEN J-GATE

### Associated and Indexed, USA

- ✍ Google Scholar
- ✍ EBSCO
- ✍ DOAJ
- ✍ Index Copernicus
- ✍ Publication Index
- ✍ Academic Journal Database
- ✍ Contemporary Research Index
- ✍ Academic Paper Database
- ✍ Digital Journals Database
- ✍ Current Index to Scholarly Journals
- ✍ Elite Scientific Journal Archive
- ✍ Directory Of Academic Resources
- ✍ Scholar Journal Index
- ✍ Recent Science Index
- ✍ Scientific Resources Database
- ✍ Directory Of Research Journal Indexing

Indian Streams Research Journal  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.isrj.net