Security System for Collection In Library

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Abstract—Library as a medium of fulfillment of information needs should be able to provide optimal service to its users. One effort that can be done is to provide the most complete and latest collection so that the users' needs for information is satisfied. However, in the process of information-gathering, users often do actions that belong to vandalism (collection destruction) even in records, some books are missing and do not return to the library. So, one of the things to note related to this problem is the application of security systems in a library. Furthermore, this paper aimed to find out how the implementation of security systems for collections in the library, especially in the library of Yogyakarta city. From the results of the analysis, in general the security system collections implemented by the Yogyakarta City Library already meets the general standards. In particular, six (50%) from twelve components of the security standard are appropriate, one (8.3%) from the 12 components are sufficient and 5 components (41.7%) from the security standard are inappropriate. Appropriate components are buildings, lighting, locks, employee recruitment, security personnel, and collection areas. The sufficient component is the electronic security system. Last, inappropriate components include fences, gates, parking, communications, and identification systems.

Keywords-- collection security, technology, security personnel, Yogyakarta City Library

I. INTRODUCTION

The development of information technology today is so intense that expanding access to information seeking, one of which is through the library. The library can be interpreted as a room, part of a building, or building itself used to store books and other publications that are usually stored according to a particular arrangement for readers to use but not for sale (Sulistyo-Basuki, 1993). As for other opinions, the library is a place of information management that originated from the activities of gathering, processing, and disseminating information for the benefit of the community (Yusup & Priyo Subekti, 2010).

Based on the two definitions above, it can be concluded that the core of the library is a place for the fulfillment of information. Particularly, library is a medium to search, process, or store information in accordance with the needs so that the activity of information retrieval can be realized properly.

However, in the process to satisfy those needs, users often do vandalism actions such as collection theft, collections mutilations and other actions that damage the library collection. As described in the book "The Art of Library: Association of Essays Nutritious on the Art of Managing the Library" that the occurrence of the collection theft in the library like the phenomenon of iceberg, each time, the number of missing books is increasing greatly (in Fatmawati, 2010). This can be proven by one of the data from the Yogyakarta city library, where in September 2015 there were 337 missing book titles (Erlianti, 2016). In fact, these actions will negatively impact both the library and the user itself such as decreasing user-trust or weakening the image of the library as a warehouse of information. In addition, this can also cause anger and frustration for the users when the information sought was in a state of disrepair so user must wait some time to get the desired information due to repair of books / magazines / journals by librarians.

Associated with the above statement, vandalism and destructive actions can be overcome by implementing the system of security and socialization to the public about the importance of maintaining the library collection. In connection with Constitution no. 43 year 2007 on Libraries article no. 6 paragraph 1f which emphasize that communities have an obligation to maintain order, security, and the convenience of the library environment. For the implementation of the security system in the library, it is usually governed by the policies and budgets of the related libraries. For example, in the application of a collateral system (collateral) for all collections borrowed by users, using CCTV, using barcodes and RFID, Security Gateway, architectural design, library design and direct supervision of librarians.

II. FINDING AND DISCUSSION

1. Security System of Library Collection

The concept of security is considered a regulatory engine to limit the sudden loss of valuables for no apparent reason. When implemented in a library, this security system can be defined as a system designed to protect all library collections from irresponsible hands for committing criminal acts such as vandalism and even theft of library collections (Ajegbomogun, 2004).

In general, the law of library security is divided into two categories. First, the law of abuses in mutilating or destroying library materials (vandalism). Second, the law commits a minor crime because it does not return the material after the expiration of the loan term (theft). In connection with the above violations, then the library needs to consider the security system In connection with the above violations, then the library needs to consider the security system so that the collections served can meet the needs of the users.

2. Security Standards in the Library

To maintain the stability of security in the library, there are several indicators that must be considered for library collections can be utilized to the maximum by the user. The following describes the explanation from several sources about the security standards that can be applied by an institution. The security of a library can be seen from various types, among others (Fennelly, 1940):

a. Common standard for building

The general standard for buildings is to use materials that do not allow a person to enter illegally or a strong and sturdy building. This standard also includes the security of doors and windows. Recommended specifications are as follows:
1) Equips all doors and windows with double locks;
2) Protects all accessible windows with iron bars;
3) Protecting all glass areas where documents (library materials) are processed;
4) Build shipping and receiving doors with steel or other materials which prevented a person from illegally entering, and locked it when not in use;
5) Equip the building with alarm system;
6) Make sure there are no roads that can be used to enter secretly, for example through a roof or adjacent building.

b. Common standard for fence

Fences have an important role in the security system because the presence of fences will protect the building from possible crimes. Common standards for fence such as the presence of fences with other buildings, or distance to other buildings should be considered. The distance should not be too close to the possibility of crime through buildings near the fence can be minimized. In addition, the fence should be checked regularly so that if there is damage can be directly repaired.

c. Common standard for gate

Standard of gate for entry access into the building should be limited. This is managed to facilitate supervision when there are users who will enter the building area. The gateway must be guarded by the security guard or other security personnel.

d. Common standard for parking

For safety standards in terms of parking, it can be done by taking into account the distance between the parking lot and the library building. The distance is not too close so that criminal action can be minimized.

e. Common standard for lighting

Standard lighting that need to be considered as follows:
1) The entrance, exit, and around the gate
2) Along the fence line
3) Parking area
4) Building yard
5) sidewalk

Lighting in question is the use of lights, so it will make it easier for security personnel to monitor the library building especially at night.

f. Lock and lock control

Locks or locking devices used in buildings, gates, and equipment should be made as different as possible and it shall be controlled by top management or security personnel.

For lock installations, the librarian / archivist must also think of a latch lock that has a separate bolt from the door knob (Hunter, 2003). This installation aims to provide extra protection against door destruction so it will minimize someone to enter the library.

g. Employee recruitment

The head of the library should sort candidates before they are hired. Recommended specifications are:
1) educational background should be in accordance with the needs of the institution
2) Fully know the applicant's personal identity such as:
   a. verified address and previous work
   b. credit record (get the applicant's credit card list)
   c. criminal records (if possible)
   d. Medical or hospital records

    e. list of savings and demand deposits

3) Conduct a thorough investigation of the applicant's background, concentrate on social status and financial expenditure, as well as obtain a list of all social organizations, civic, fraternal, and religious of the applicant.

4) Prepare the right documents for employees to read and willing to sign the rules associated with the institution.

h. Security personnel

       The head of the library should hire a security officer or assign certain officials to take responsibility for security. These security personnel may be obtained from third parties such as those providing security services.

i. Communication

       Communication in this case means the existence of communication between institutions such as libraries with local security agencies such as police. Forms of communication can be in the form of cooperation related to security. Recommended specifications are as follows:

1) Providing communication tools such as telephones, two-way radios, or other communications equipment that facilitate communication between security personnel and the police.

2) The existence of regulations / guidelines on the use of telephone, radio, or special alarm lines from local police.

j. Identification system

       The identification system can be implemented by using an identity card system to identify authorized personnel when using login access. This is intended to facilitate security in preventing crime. For example: when there are users who will go into the library, it must be checked on the card members so it will minimize the people who do not have the authority to enter the library.

k. collection area

       Safety standards for the collection area are also important. It can be applied by placing a collection area in a room that is easily monitored by security officers and librarians. Although there is CCTV but it is still important to note because sometimes CCTV can not reach areas that may be used by users to commit criminal acts such as vandalism or stealing the collection.

       In the installation of CCTV, there are several steps that need to be considered, among others: determines the main application of CCTV systems, comprehends the location and characteristics of the monitored room, selects types and features of cameras, determine the best location to view the monitor, and determine the type of storage media / filing equipment system. The application of CCTV systems should have the ability to observe visually, to monitor closely, and to record. Observation through CCTV will provide real-time information for detection and identification purposes. To get the best results, it will be necessary to note the object or area to be observed. Different surfaces and materials contain different colors that reflect light levels. Incoming light affects image clarity. A better lighting will produce a better picture (Akhmad, 2015).

       Based on the above explanation, there are five points of ideal security system to be implemented by the library (in Mittal, 2014), that is:

1) Use of guard checkpoint system at every exit door or installation of electronic monitoring equipment. For the use of electronic monitors, it is conditioned with the needs of the library considering the price is quite expensive. For example, the use of a set of RFID, the library must provide the cost for a special piece of ribbon or metal plate inserted in each book and the installation of its security system. However, the benefits are also maximized as a form of security to the collection;

2) Restrict access to collections. The point is that the person who will borrow the book must be clearly proven by the membership and the use of the ID in order to facilitate the monitoring of the existence of a collection such as the name of the borrowing member and the time of the loan;

3) The key must be kept by the authorized person. The use of keys should be clear. for example, librarians working in IT area. They have access rights in the form of master key and any person without authority in the IT field may not own the room key;

4) Cooperation between librarians and users. For library security, it is also necessary cooperation between librarians and users and cooperation between systems with each other;

5) Library strives to educate the public about the importance of caring for books as well as security efforts that can be done if you see someone doing vandalism and theft against the collection in the library.

       Apart from these five points, there is one important point that can be an additional alternative for the implementation of security systems in the library, namely the use of electronic security systems. Electronic security systems can also be useful for controlling unethical practices in libraries. Some of the major electronic security systems that can be of great benefit to the library include the Closed Circuit Television (CCTV),

security gateway, radio frequency identification (RFID), perimeter alarm systems, motion detectors, etc. (Osayande, 2011). For example PNRI that have implemented RFID in the library. RFID is a device that can identify a collection of through the frequency of affordable by putting rfid tags on a collection of so that a collection out of the room will always identified or illegible by the device (Cahyana, 2010).

Associated with the above ways, there are some preventive measures that can be attempted by the library in preventing crime, some of which are:

1) There is controlled access such as the use of security gate, biometrics, smart card;
2) The presence of lockers / properties to store users' items;
3) There is physical checking for the user who leaves at the exit by the library staff or security guard.
4) Installation of electronic book detection systems such as the use of Magnetic Electromagnetic Strips, RFID, etc;
5) Book settings on the shelf;
6) ID Card verification;
7) Sorting the collection on the shelf to search for books that are victims of vandalism;
8) Using CCTV and mirror;
9) Video camera equipment;
10) Uniformed security staff to patrol around the library;
11) Training for the protection of fire, earthquake, flood;
12) Use firewalls and passwords for online services;
13) There is a standard photocopying facility;
14) Permanent locking for all windows.

3. Example for Implementing Security Systems in Libraries

One of the libraries that have implemented the security system in their practice is the Yogyakarta city library. This library applies the collateral system for lending collections in the library. In general, the implementation of security systems in this library is quite good because it meets several standards that have been proposed by experts. The details of the implementation of security system in Yogyakarta city library are as follows:

a. Building

In general, the library building of Yogyakarta city is in accordance with the security standards because the building design does not allow someone to enter illegally. The main door (main access) and windows are also standardized because it were equipped with iron bars and strong keys so difficult to be damaged by thieves.

b. Fencing

Yogyakarta city library already has a fence surrounding the building, but so there are still some shortcomings, in particular:

1) The height of fence is still too short and easy to break.
2) There are several parts of the fence that are damaged to make it easier for someone to enter illegally.

c. Gate

Yogyakarta city library has two gates one to enter and the other to exit. Referring to the safety standard, the gate is kept to a minimum to be easily monitored by the librarian / security team. For this library, entrance and exit gates are guarded by security personnel so as to facilitate monitoring of incoming / outgoing visitors.

The physical condition of the gate does not meet the safety standards because the height of gate is shorter than the height of the fence. Such circumstances can allow people to easily break into the library area.

d. Parking

The parking area of Yogyakarta city library has not reached the standard, because the distance between the parking lot and the entrance is very close. This condition will certainly facilitate access to theft action. In addition, the parking area is still limited and less-organized.

e. Lighting

Lighting in Yogyakarta city library has reached the standard of security system. In some parts of buildings such as gates, entrances, yard, and parking areas are fitted with lights; it is because there is a Tamara service on the left side of the library building. This service is opened from 08:00 to 24:00 pm so it needs adequate lighting.

f. Master key

The key usage in Yogyakarta city library is in agreement with the security standard in which each librarian does not necessarily have the authority to use the key. Only security personnel and some employees are given special authority for that matter. For example, only Head of Sub Division of Library for IT field that has key and access for IT room. This will minimize the possibility of theft from the insider or library worker and also makes it easier to monitor the security of the room.

g. Employee Recruitment

For employee recruitment, Yogyakarta City Library is in compliance with the required qualifications. The recruitment of employees is done in two ways, specifically:

1) Selection of CPNS (Candidate for Civil Servant), this procedure has a strict screening system, in accordance with the required classification and has never been involved in criminal cases.

2) Through a third party, where the recruitment of library staff also has some special requirements, such as Police Note Certificate (SKCK).

h. Security Personnel

Security personnel in Yogyakarta city library are in step with safety standards because it comes from an outsourcing company that is equipped with security competence and ready to operate for 24 hours divided into two shifts. The first shift starts from 06:00 am to 06:00 pm, then continues from 06:00 pm to 06:00 am.

i. Communication

Communication here is related to the existence of communications with several security institutions such as with police department. In Yogyakarta city library, there is no communication network with police institution when the theft occurred. The procedure of action is limited to asking for stolen collections and requesting a copy of the identity card of the theft.

j. Identification System

The identification system in Yogyakarta city library is not in accordance with existing standards. Since not all users leave their identity, for example, for non-library members are allowed to enter the library without having to show off or leave an identity mark. They just only sign the guest book to enter.

k. Collection Area

The collection areas in Yogyakarta city library are easy to monitor by the librarian; there is no area that allows a person to commit a crime towards the collection, especially CCTV is available to monitor all of the user activity. However, there is no special officer assigned in the reading room. This work is managed by officers in the circulation service indirectly.

l. Electronic security system

Electronic security system in Yogyakarta city library is standardized; it is indicated by the use of CCTV in several areas. The use of CCTV in eight strategic points around the library that serves to monitor all the activities in the library building. For placement, only 3 CCTV are visible, in particular:

1) First floor, CCTV position is on the bookshelves that facing the door. The main purpose of this placement is to monitor incoming and outgoing users.

2) Second floor, CCTV position is at the middle-top of the room. The main purpose of this placement is for monitoring in any direction related to the activity of the user on the reference service.

3) Outside the Library, CCTV position is on the doorstep. The goal is to monitor users who leave the library room. Type of CCTV in the outside the library are different from CCTV on the 1st and 2nd floor. This CCTV has two sides view which is able to monitor more extensively to the left and right sides of the library.

4. Analysis of security system implemented by Yogyakarta city library with general security standard

No.	Elements	Security System Standard	Security System in Yogyakarta City Library	Findings
1.	Building	Buildings must be secured from illegal entry	Impossible to enter illegally	Appropriate
2.	Fencing	Fence lines should be checked and repaired regularly for integrity	In good condition	Inappropriate
3.	Gate	The number of gates for entry access must be minimum.	Two gates	Inappropriate
4.	Parking	Parking should be separate from the library building	Too close with building	Inappropriate
5.	Lighting	Lighting is provided for: entrance and exit, along the fence, parking area, yard, sidewalk.	Lighting is provided for: entrance and exit, along the fence, parking area, yard, sidewalk.	Appropriate
6.	Locking	keys should hold by the authorities	Only authorized person hold the key	Appropriate
7.	Employee Recruitment and Hiring	Filtering prospective employees before they are hired	recruiting employees through guaranteed selection and authorized parties	Appropriate
8.	Security Personnel	Hiring security personnel	Yes	Appropriate
9.	Communication	Regular communication between security personnel and police	Poor communication system with police if theft is happening.	Inappropriate
10.	Identification system	Users must use ID card system	Visitor is able to pass without member card or ID card.	Inappropriate
11.	Collection Area	Visible for monitoring by librarian	Entire collection area is visible by librarian and CCTV	Appropriate
12.	Electronic Security System	CCTV, RFID, and Security Gateway	CCTV	Sufficient

III. CONCLUSION

Library security is significant element in library services for the community (Lorenzen 1996; Bello 1998; Johnson 2012). This is related to the function of the library as an instructional midpoint so as to meet the needs of public information.

Based on the above discussion, it can be concluded that the implementation of the security system in Yogyakarta City Library is currently limited to surveillance of collections with the use of collateral system (guarantee) and the application of CCTV. For some elements of library buildings such as doors, windows, fences, etc., the security system has not been properly implemented. The security from library staffs also has not received serious attention from the head of the library.

From the analysis results, it can be seen that 6 components (50%) of the 12 components of the security standard are appropriate, one component (8.3%) of the 12 components is quite appropriate and 5 components (41.7%) of the 12 components of the security standard are inappropriate. Components that comply with security standards are buildings, lighting, locks, employee recruitment, security personnel, and collection areas. Components that adequately meet the minimum standards are electronic security systems. Components that do not meet the safety standards are fence, gate, parking, communication, and identification system. However, the overall security system in Yogyakarta city library is sufficient to meet the standards.

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