Integrated Library Information System in Managing School Library in the Industrial Revolution Era 4.0

Arifin Suking
Education Management Department
State University of Gorontalo, Indonesia
arifin_suking@ung.ac.id

Nelpiyanti Hulopi
Education Management Department
State University of Gorontalo, Indonesia
nelpiyantihulopi@gmail.com

Ikfan Haris
Education Management Department
State University of Gorontalo, Indonesia
ifanharis@ung.ac.id

Abstract: This study aims to find out: the use of IBRA v.6 applications on the transaction system, print library systems, member systems, OPAC systems, and report systems in school libraries, the method used is quantitative. Techniques for collecting data using questionnaires, interviews, and documentation. The data analysis technique uses descriptive analysis. The results of this study indicate that the use of IBRA at: (1) the utilization of the transaction system is in a good category, because it is supported by adequate facilities and infrastructure, (2) the print library system is in the poor category because most students already use e-learning libraries, (3) the member system is in a good category, because this system has been used in processing student data and library card making, (4) the OPAC system is in the poor category, because this system has not been used maximally for sharing library searches and delivery services, and (5) the utilization of the IBRA application on the reporting system is in a fairly good category.

Keywords: integrated, library information system

I. INTRODUCTION

School library is one part of educational institutions that has an important role especially in responding to the industrial revolution 4.0, both in terms of roles and functions, because school management is the center in supporting learning activities carried out by teachers, while for library students is a place to gain knowledge through various reference collections in the library.

Whereas more specifically the school library aims to absorb and gather information, create an organized forum of knowledge, help develop language skills and thinking power, educate students to be able to use and maintain library materials efficiently and provide a basis for independent study.

The role of information technology is very important in maximizing library services, because most of the work carried out in the library is in the form of services to users, so that service methods that are fast, easy and efficient are needed. Library services include circulation services, reference services and reading room services, [1]. At present it is expected that schools can design library management using the IBRA application.

The IBRA (Integrated Library Information System) application or integrated library information system, which is a database management program package built and designed specifically to support administrative and information systems services in libraries, is designed specifically for libraries using LAN networks (Local Area Network).

Libraries like this need to be equipped with various books that have used barcodes, have a library headroom, reference room and service room. IBRA-FOS (IBRA Free Open Source) is a web-based integrated library information system (Integrated Library Information System). This system can help the officer in the information system library is quite simple and easy to use, the features contained in this application are quite complete and can help librarians in managing their libraries, such as printed libraries, print barcodes, labels and cards catalog books, reports and statistics, digital library, multimedia library, membership, circulation.

This IBRA application is used, to facilitate student service, especially in borrowing and returning books, only by filling in the student's Number as a first step because if students do not fill Nis, then when the student wants to borrow a book, and this application cannot operate. With this application also, it will be known how many students often visit the library.

Utilization of applications in the field of education, especially in the library would certainly help and facilitate the recording of the library card management, the number of references, borrowing or circulation until the preparation of reports. Based on the description above, the focus of this study is how to use the IBRA v.6 application on the transaction system, print library systems, member systems, OPAC systems and reporting systems in the library of Gorontalo 1 Vocational High School?

II. THEORETICAL REVIEW

The library is one of the work units in the form of a place to collect, store, manage and manage library material collection systematically to be used by users as a source of information as well as a fun learning tool [2].
The main task of the library is to collect information, process, present, and serve information needs for library users. So, the library is obliged to manage the information needed by the user. There are several library functions, namely: (1) information function, namely the library provides various information including printed material, recorded, and other collections in order to meet the needs of the school community, (2) the function of education as a means to improve education quality and implement educational goals, (3) cultural functions, namely as a means of improving life quality and fostering a culture of reading, (4) recreational functions, namely as a means to use leisure time with positive recreational and entertainment reading, (5) research function as a place to store collections to support research activities and (6) deposit functions, namely libraries are obliged to store and preserve printed, non-printed works [3].

That effective services are those that can meet the desires of users in terms of: (1) the provision of information in accordance with the wishes of users, (2) the right, free, adequate and not too binding time, including evening and night opportunities for community groups, (3) freedom, procedures and access to information, not rigid with loose supervision, not too strict, orderly, conducive and sympathetic, (4) an atmosphere that is pleasant, safe, calm, peaceful, far from noise and noise, (5) attitudes and behavior of officers who are attentive, friendly, polite, are guiding, guiding, attentive, mastering problems, (6) discipline that is simple, easy to understand, follow and implement, (7) other facilities and facilities such as: guidance, instructions, brief information or others, (8) create a good, pleasant and satisfying impression so that other people want to come back again, (9) customer / consumer oriented and independent.

Integrated library information system is a data base management program that is built and designed specifically to support administrative and information systems services in the library. One of the advantages of IBRA is the ability to manage digital libraries, video media libraries, audio, images, CDs, barcode circulation systems, table and graphic statistics. Library information system is a specially designed software to facilitate the collection of library collections, catalogs, member / borrower data, library transactions and circulation. IBRA is an automation system software that is a superior product from the Teratama Library Support System (TLSS) [4]. That in library science, circulation is often known as borrowing, however the definition of circulation services is actually covering all forms of recording activities related to utilization, the use of library collections in an appropriate and timely manner for the benefit of library service users.

This is in line with what was stated by [5] that one of the main activities or main services of the library is borrowing books and other materials. Borrowing activity is often known as the circulation meaning borrowing. [6] suggests reference services have an important role in libraries, because through dialogue and communication can help users find the information sought. Thus, referring to reference services is an activity that helps library users in determining information by answering questions with reference collections and providing guidance to find and use reference collections. Physical database management is not carried out directly by the user, but is handled by a specific or specific software (system).

This software is called a database management system or DBMS (Data Base Management System) that will determine how data is organized, stored, modified and retrieved. Application programs used in libraries, such as CDS / ISIS, Inmagic, VTLS, Dynix, Tinlib, have resulted in the implementation of library automation systems, one of which is online catalog creation. The OPAC catalog is widely used in various libraries because it has many advantages, including: (1) information retrieval can be done quickly and precisely, (2) searches can be done together without waiting for each other, (3) certain lines without needing files, (4) searches can be done by using various approaches at once, for example through the title, author, subject, year of publication, publisher and so on, namely by utilizing Boolean logic searches, (5) bibliographic recordings entered into unlimited catalog entries, and (6) searches carried out from several places without having to visit libraries that are using LAN (Local Area Networks) or WAN (Wide Area Networks) networks.

Library reports are needed in every activity and program that has been done by the library, reporting is the responsibility of the library in its activities. In addition, it also serves as a benchmark for the success of library activities and an overview of library progress. Library reports can be taken from library statistics, which include library material statistics, member statistics, visitor statistics, library services and so forth. Reports can be made on a predetermined scale, starting from daily reports, monthly reports, quarterly, semester, or annual reports. Reporting in the form of statistics makes the term monthly statistics, quarterly statistics, or annual statistics. But in general, for reports submitted in the form of annual statistical reports. Library statistics can be presented in the form of tables, graphs or diagrams [7].

III. METHODS

This research was conducted at Gorontalo State Vocational School I Gorontalo Province. The research design uses quantitative descriptive explanatory types. Indicators in this study are: utilization of IBRA v.6 application on transaction systems, print library systems, member systems, OPAC systems, and reporting systems. Data collection techniques using questionnaires, interviews, and documentation. Data analysis using descriptive analysis per percentage

IV. RESULTS AND DISCUSSION

The results of the study on the analysis of the use of IBRA (Integrated library information system) applications in library management at Gorontalo 1 Vocational High School, which include: transaction systems, print library systems, member systems, OPAC systems and reporting systems can be described as follows:

1. Transaction System

The results of the study show that, the transaction system in the IBRA application in the library is in a good category with a percentage of 90.63%. This can be seen from excellent loans and also returns using good barcode. The transaction system in the IBRA application is for
borrowing and returning books. Thus, it can be ascertained that using barcodes in terms of borrowing and returning books is very helpful and reduces errors and is fast in loan and return services. [8] suggested that the use of this barcode scanner has two additional advantages, namely (1) minimizing input errors caused by computer operator or cashier errors; and (2) the use of barcode scanners accelerates the data entry process, thereby reducing the number of long queues.

The process of borrowing and returning books using this application is also one of the good services by the library manager. [9] suggests library services are divided into direct services and indirect services. Direct services related to library users such as circulation services, references and user services, while indirect services are provided by the library in the form of giving motivation to users to utilize library facilities. [10] suggests that if the service to the user is satisfactory then the performance is good, on the contrary if the service provided is not satisfactory, it is assumed that the library has not been able to serve well.

2. Print Library System

The results of the study show that the print library system in the IBRA application that has a library is in the not good category with a percentage of 66.76%, this is because there are still a collection of magazines that are rarely used because there are no new magazines and there is a collection of CD-DVDs have not been used. In this print library system that is often used is inputting textbooks, textbooks and reference collections. Where every semester there is always a textbook to be purchased, because the purchase of this book has been included in the school budget, as well as the textbook.

The school prioritizes the type of textbook or textbook that supports students in learning. This is supported by [11] the selection of collections of all library materials must be carefully selected, adapted to the needs of users and according to the priority scale set for school libraries in general. Comparison of types of library materials 60% of collections supporting the curriculum both textbooks, compulsory and supporting books, and 40% general collections of both fiction and books on other general knowledge. [12] that the availability of this collection readiness of library materials that have been collected, processed, and stored for later served and disseminated information to users to meet information needs.

3. Member System

The results of the study show that, the member system in the IBRA application that is in the library is in a good category with a percentage of 84.74%. The member system that is in the application, has been used well and is very much needed for managing student data as well as for making library cards. Making this student card is made a barcode, the barcode on this library card is the student’s number [13], data processing consists of data storage and handling activities described as data storage which includes filling, searching and maintenance, while comparison data includes various activities of verifying, comparing, sorting, extracting, and manipulating.

4. OPAC system

The results of the study indicate that, the OPAC system in the IBRA application in the library is in the not good category with a percentage of 62.52%. The OPAC system in this application has been used. But it can be seen from the results that the percentage is not good. Because there are still those that have not been used on this system, for example in service delivery for all types of collections and also, shared library searches. But to monitor students, this application is very helpful. Because using this system can be seen how many students visit every day.

5. Report System

The results of the study show that, the member system in the IBRA application in the library is in a fairly good category with a percentage of 74.07%. The report system in this application is quite good, because everything on this system has been used. To view reports every month, every year, periodically and even those who enter the book will be seen using this system [14]. That all forms of recording activities related to the use and use of collections in an appropriate and timely manner for the benefit of library service users.

Whereas according to [15] circulation services are the first part that relates to users and is most often used by users. This service is also said to be the spearhead of a library, including the school library. The use of school libraries has received government attention through [16] that every formal and non-formal education provides facilities and infrastructure that meet educational needs in accordance with the growth and development of the physical, intellectual, social, emotional and obligation potential of students. Based on the description of the above article, it can be stated that the need for school libraries is an absolute requirement, as well as the use of school libraries is an activity in the teaching and learning process.

V. CONCLUSION

Based on the results of the study, the utilization of the IBRA (Integrated library information system) application in library management can be summarized as follows:

1. The transaction system in the IBRA application at Gorontalo 1 Vocational School is in the good category, because it is supported by the facilities and infrastructure in the library support in terms of loans, returns, one of which is a barcode scanner;
2. The print library system in the IBRA application is in the category yet, because there are still a number of them including a collection of magazines, a collection of CD-DVDs and reference collections that are rarely used on this system;
3. The member system in the IBRA application is in a good category, because this system is used to process student data at once in making library cards;
4. The OPAC system in the IBRA application is in an unfavorable category, because shared libraries and service delivery have not been utilized, even though the system already exists;
5. The report system on the application is in a fairly good category, because this system has been used and can assist in making reports.

REFERENCE

[1] Bafadal Ibrahim, (2005), Pengelolaan Perpustakaan Sekolah. Jakarta. Bumi Aksara.
[2] Darmono. 2001. Manajemen Perpustakaan. Jakarta: Grasindo
[3] Sutarno, NS. 2005. Tanggung Jawab Perpustakaan. Jakarta: Panta Rei
[4] Las, H. S. 1993. Pengelolaan Terbitan Berkala. Yogyakarta: Kanisius.
[5] Basuki, Sulistiyo. 1991. Pengantar Ilmu Perpustakaan. Jakarta: PT Gramedia Pustaka Utama
[6] Rahayuningsih, F. 2007. Pengelolaan Perpustakaan. Yogyakarta: Graha Ilmu
[7] Hartono, Jogiyanto. 2016. Partial Least Square (PLS): Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis. Yogyakarta: Andi
[8] Rosihan Ari Yuana. 2010. 67 Trik dan Ide Brilian Master PHP. Lokomedia, Yogyakarta.
[9] Yusuf, Pamit M. 1991. Mengenal Dunia Perpustakaan dan Informasi. Bandung: Bina Cipta.
[10] Sutarno. NS. 2005. Tanggung Jawab Perpustakaan. Jakarta: Panta Rei
[11] Darmono. 2007. Perpustakaan Sekolah: Pendekatan Aspek Manajemen dan Tata Kerja. Jakarta: Grasindo.
[12] Yulia dan Sujana. 2009. Materi Pokok Pengembangan Koleksi. Jakarta: Universitas Terbuka
[13] Sutabri, Tata. 2005. Sistem Informasi. Yogyakarta: Andi.
[14] Lasa HS. 2005. Manajemen Perpustakaan. Yogyakarta: Gama Media
[15] Basuki, Sulistiyo. 1993. Pengantar Ilmu Perpustakaan. Jakarta: PT, Gramedia Pustaka Utama
[16] Undang-undang Republik Indonesia N omor 23 tahun 2003 tentang Sistem Pendidikan Nasional.