



## **Evaluation of implementation of library automation system (SLiMS) 9 bulian in collection processing at smpn 1 Majene library**

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### **ABSTRACT**

The main problem discussed in this research is evaluating the implementation of the library automation system (SLiMS) 9 Bulian and what obstacles are encountered in implementing the library automation system (SLiMS) 9 Bulian in processing collections at SMPN 1 Majene Library. The purpose of this study is to describe how the SLiMS 9 Bulian is implemented in collection processing and the obstacles encountered in implementing the system in conducting collection processing. The type of research that the author used in this study was descriptive research with a managerial and pedagogic approach. Then, this research's data source is primary and secondary data. Interviews and documentation guide the research instrument. Data collection methods through observation, interviews and documentation. Then, for data analysis techniques through data reduction, data presentation, and drawing conclusions. The results showed that: (1) the evaluation of the implementation of library automation system (SLiMS) 9 Bulian in collection processing proved to be beneficial in increasing effectiveness, improving performance and increasing the efficiency of librarians and library management staff in collection processing such as in inventory, cataloguing and classification activities. (2) Obstacles encountered in the implementation of library automation system (SLiMS) 9 Bulian in processing collections from the research results show that this implementation is still constrained by human resources who do not fully know about the automation system as a whole, lack of leadership support one of which is regarding financial support in collection processing activities, as well as the lack of system support facilities and infrastructure so that there are still several activities in collection processing that have not been maximized. This research implies that from the evaluation results that have been carried out, librarians can further maximize the operation of the SLiMS system so that the system can be optimized in all collection processing activities in the

library to produce more effective and efficient work results. In terms of the obstacles faced, it is increasing human resources through various trainings for librarians and library management staff building leadership awareness of the importance of library development so that it can support various needs for optimizing the automation system.

**Keywords:** Library Automation System, SLiMS, Collection Processing

## 1. INTRODUCTION

In the era of globalization 4.0, the government must keep up with technological developments according to the times. One of the fastest-growing information resource providers in Indonesia is the library. Technology's role and information dissemination have now almost penetrated all sectors of human life. So that existing science has also developed, significant developments have caused fundamental changes in all aspects, such as supporting operational and managerial systems in government agencies, which are very important.

Along with the rapid development of technology and the dissemination of information, the world of libraries has also experienced development. The library is one of the most critical factors in educational institutions that can support the improvement of student achievement and quality, improvement and smooth teaching and learning activities and improvement of the quality of the educational institution. If previously library management only used manual human labour. Part of the management work in libraries already involves the role of computer-based information technology.

School libraries are educational facilities that support teaching and learning activities to achieve educational goals in schools. Continuously improve user services to contribute to the teaching and learning process. To support this function, libraries follow the development of information technology in the hope that it can help encourage the fulfilment of user information needs and a systematic library service system. (Hutama and Rohmiyati 2013: 12-24). Especially with the application of information technology in library management, the service process in the library can run effectively and efficiently.

The rapid development of science and technology also positively impacts libraries. The application of technology in libraries makes it easier for libraries to carry out every activity. Where collection handling was done manually in the past, now collection handling is facilitated by library automation applications. Along with the rapid development of technology and the dissemination of information, the world of libraries has also changed. The school library is one of the most essential parts of an educational institution to help improve student achievement and quality, improve and facilitate teaching and learning activities, and improve the quality of educational institutions.

Previously, library management only used manual labour. Now part of the job of a library manager is the role of information technology.

The development of information technology in the library field is caused by the need to obtain reading materials very quickly to provide optimal service to users. This development is supported by open-source-based software engineering. open source Software (OSS) is a development system that an individual or central organization does not coordinate, but by actors who work together by obtaining source code (Source Code) that is distributed and available free of charge which usually uses internet media facilities (Triyanawati, 2014: 3). The type of software that is widely used is the Senayan Library Management System (SLiMS). This system has developed rapidly and quickly, marked by the number of libraries that use the system. Various awards have been received, including the Indonesia Information Communication and Technology Award (INAICTA) 2009 in the open source category. Therefore, along with the current times, SLiMS has released various versions, including SLiMS 5 Meranti, SLiMS 7 Cendana, SLiMS 8 Acacia and the latest is SLiMS 9 Bulian.

Initially, collection processing activities were carried out manually by librarians who worked on processing. However, along with technological advances, the collection processing process can be done quickly by supporting applications, such as this SLiMS application. SLiMS is a library automation-based application developed by the Library of the Ministry of National Education (Kesuma, et al. 2021: 248-254). SLiMS applications can be chosen because of their advantages, such as relatively easy installation, user-friendly application interface, many community members, and many other supporting features/menus that will significantly help librarians carry out library document handling activities. In addition, the SLiMS application will also benefit all registered library members because it can show book cover images in the library to the library document search function based on library data that library members can access in searching for library materials they want.

In the application of the library automation system, an evaluation process is carried out to obtain helpful information to determine the proper assessment of the process of implementing the SLiMS 9 Bulian library automation system in collection processing, namely in terms of the use and utilization of the library automation system.

Evaluation to obtain useful information to determine the right assessment of the process of implementing the SLiMS 9 Bulian library automation system in collection processing, namely in terms of the use and utilization of the library automation system.

The library located at SMP Negeri 1 Majene, West Sulawesi Province, has also implemented one of the library automation systems, namely the latest automation

system, SLiMS 9 Bulian, to carry out collection processing activities. The automation system must undoubtedly pay attention to other activity standards such as inventory, classification, cataloguing, and other activities related to the application. Therefore, researchers feel that evaluating SLiMS-based automation activities is needed at the SMP Negeri 1 Majene library, which has operated since early 2021. The application of SLiMS has provided various conveniences for librarians in processing library materials, one of which is in the administrative process and processing of library collections which can be done more quickly than before the existence of this system librarians manually. In addition, there are several reasons behind the SMP Negeri 1 Majene Library using SLiMS, especially because SLiMS is open-source and developed as needed. The collections owned by the library are considered sufficient and only require a few staff.

Some obstacles that are still being faced, namely the lack of optimal facilities and infrastructure needed in implementing the automation system, such as this system has not been connected to hosting so that it cannot be published online is still portable-based, which results in the use of the SLiMS system in the SMP Negeri 1 Majene library is still limited to processing collections, the occurrence of down servers, human resources in the library who do not fully understand how operating the automation system and still lack support from leaders (stakeholders). Other facilities and infrastructure, such as library buildings, could be more optimal. This is because the existing space is still minimal and needs to be improved.

## **2. METHODS**

The type of research used is descriptive research with a qualitative approach where the data obtained are obtained from interviews to describe the data that the author can get through informants. This is what was revealed Bogdan and Taylor that qualitative research is a research procedure that produces descriptive data in the form of written or spoken words of people and observable behaviour (Zuriah, 2009 p. 92).

The determination of informants in this study was carried out by purpose sampling techniques, where the selection was carried out deliberately based on predetermined and established criteria.

According to Sugiyono (2005: 62), data collection techniques are the most strategic step in research because the primary purpose of research is to obtain data without knowing data collection techniques, researchers will get data that meets the data standards set. Data collection techniques can be done by observation, interview, and documentation.

Data analysis is the process of finding and compiling data that has been obtained from interviews, field notes, and documentation. Data analysis is done by organizing

data into units, synthesizing, arranging into patterns, choosing which ones are important and which will be studied, and making conclusions.

### **3. RESULTS AND DISCUSSION**

#### **Evaluation of Perceived Usefulness in the Application of Library Automation Systems (SLiMS) 9 Bulian in Collection Processing**

The use of SLiMS 9 Bulian as a library automation system significantly impacts the SMP Negeri 1 Majene Library. Librarians feel the benefits of this application because the effectiveness and efficiency of work with the SLiMS 9 Bulian system have a considerable influence. The presence of this system helps librarians in library tasks that were previously done manually.

One factor that influences the acceptance of a technology is the view that the technology benefits its users. In line with that, libraries build library automation using SLiMS 9 Bulian because the use of this system in libraries is believed to be useful for libraries, both users and librarians in processing collections.

Almost all fields of work utilize SLiMS 9 Bulian in everyday life. In this case, it can speed up work and improve the quality of librarian performance, for example, in processing library collections previously carried out manually in making labels and book card catalogue forms. However, with SLiMS 9 Bulian, book labels are available directly in print to be processed for labelling library materials. So, using SLiMS in libraries immediately improves the performance of library managers.

#### **a. Increase Effectiveness**

Collection processing activities in the SMP Negeri 1 Majene library are now much more effective thanks to the application of a library automation system, namely SLiMS 9 Bulian, which benefits all library activity processes. The collection processing process that was initially done manually now with the system makes the way of working much more precise and produces work that is much more useful in making it easier for librarians to process collections.

Book collections that were previously not equipped with good administration, such as the unintegrated collection of books both old and new, the labeling process that is not found in several books, the classification of books that are mostly not a class number that must be based on Dewey Decimal Classification (DDC) guidelines and the unavailability of book catalogues and cards in the collection, this makes the books only stacked on the floor and table so that they are not arranged neatly on the storage shelf.

However, after the implementation of the SLiMS 9 Bulian system, all the processing of the above processing activities can be done very quickly because this automation system is integrated so that if the collection has been inputted in the system, it can automatically be printed in the SLiMS 9 Bulian system.

The process of collection processing activities, such as the cataloguing process, has been very much more effectively done by simply inputting collection bibliographic data into the SLiMS system so that later book label and barcode printing activities can be done quickly, the availability of card catalogue print menus ranging from the title, author and additional catalogue.

In addition to SLiMS providing librarian effectiveness in carrying out cataloguing activities, it is also influential in determining book classification numbers that can be done in this system by only copying cataloguing from several catalogue databases connected to SLiMS 9 Bulian, one of which is the Perpunas catalogue database so that automatically the bibliographic data of the collection including the classification number has been pasted into the database bibliography of the system we have. Likewise, stock-taking activities can be done quickly because of the availability of the inventory menu in SLiMS 9 Bulian, so it effectively checks available and lost collections in the library.

This effectiveness makes librarians work optimally so that the collection processing process can run effectively and minimize the errors needed. The proof is that the application of SLiMS 9 Bulian in processing collections at SMP Negeri 1 Majene Library, when compared to the number of work results before implementing the SLiMS system, is much different, meaning that the work of implementing this automation system is more effective in accelerating collection processing activities as well as for tracking collections and retrieving information in the library.

Therefore, implementing the SLiMS 9 Bulian automation system has provided benefits in increasing the effectiveness of librarians so that library development is much better than before. Various features in the SLiMS 9 Bulian system provide librarians with effectiveness in developing libraries to be more optimal.

#### b. Improve Performance

The performance of librarians and library management staff at SMP Negeri 1 Majene after implementing the SLiMS 9 Bulian system has increased achievement and work results. The increase in achievement is in the case of those who previously did not know about the existence of an automation system that could bring convenience in carrying out various collection processing activities, one by one already know to operate the SLiMS 9 Bulian system even though it is not always evenly distributed because the

level of difficulty of each library material processed also determines it. Therefore, everyone's knowledge and ability to process library materials is decisive.

The increase in work results can be proven from the implementation of tasks, especially the results carried out have increased significantly, namely, collections that were previously uncataloged, not adequately classified and only piled up on the floor are now mainly processed and neatly arranged on storage shelves. Before the existence of this system, librarians and management staff in libraries used to sit and stay silent, but now they are actively improving every day to improve all administrative systems that previously did not exist and fix book collections so that their management is by the rules and standards in processing collections.

Librarians and library management staff are now greatly helped by the implementation of this SLiMS automation system. Some collection processing activities that were previously difficult to complete correctly due to the manager's ignorance of how to determine specific classification numbers, quickly determine book cataloguing and determine entry headers and additions in the collection processing process are little by little proficient in knowing various processes in processing collections and can operate the system. This provides benefits in improving the performance of librarians and library management staff in the process of processing collections in the library. This makes work that was not done before work together to divide tasks to develop a better library.

This application not only impacts libraries but also improves the workability, work performance or work performance of librarians and library managers, which can be done in various ways to achieve the desired goal, namely creating an automated library.

In addition, all work is considered to feel better because librarians act as data inputs, thus minimizing the occurrence of human error so that the problems worked on provide better results. Therefore, implementing the SLiMS 9 Bulian library automation system benefits the library and improves the competence of librarians and management staff in the library for the development of automation-based libraries.

### c. Increase Efficiency

Almost all fields of work utilize SLiMS 9 Bulian in daily life, especially in the collection processing process activities, which can accelerate librarians' work. For example, collection processing activities in inventory activities previously took a long time because they were done manually. At the same time, with SLiMS, this only requires a short process for making book numbers, labels, barcodes, catalogues, and even reporting can be done quickly.

Applying the SLiMS 9 Bulian system in processing collections at the SMP Negeri 1 Majene Library further accelerates work implementation because, through this SLiMS system, librarians can eliminate repetitive work. Through this system, the process of determining classification numbers and determining bibliographic description data for cataloguing can be done in an easy and fast way because, in SLiMS 9 Bulian itself, a copy cataloguing feature has been prepared that is connected to several catalogue copy services including MARC SRU services, Z3950 SRU services and P2P services, each of which is connected to the catalogue databases of several large libraries, one of which is the National Library Republic of Indonesia.

Therefore, implementing the SLiMS 9 Bulian automation system has provided benefits in increasing the work efficiency of librarians and management staff in libraries, so the collection processing process has now slowly developed. This system completes the work quickly according to the targeted time in terms of quality and results.

### **Obstacles Faced During Implementing Library Automation System (SLiMS) 9 Bulian in Collection Processing**

SMP Negeri 1 Majene Library needs to implement the library automation system optimally. The application of the SLiMS 9 Bulian system is mostly focused on processing collections carried out in the bibliography module in the SLiMS 9 Bulian system. In addition, various other activities also include the process of making book inventory such as making labels and barcodes, making membership cards and activities that have to do with library administration. All these activities can be done more easily integrated into this SLiMS 9 Bulian system.

#### **a. Human Resources (HR)**

The need for more trained staff is one of the obstacles hindering the development of automation in libraries. The development of library automation must at least have human resources who can operate computers, even some experts in the field of libraries. Many libraries are still dumping grounds. This means that if there is staff who is difficult to foster, usually the leader will move the person to the library. This can cause the development of automation systems in libraries to experience obstacles. This is why many libraries, especially school libraries, have just developed.

The library of SMP Negeri 1 Majene itself is still constrained by its human resources, most of whom still need to gain expertise in the field of librarianship, even though most of them are not from the library field. In the process of implementing SLiMS 9 Bulian, librarians and library managers still need to understand the system in detail fully. However, they have been able to operate this system even though they are

limited to knowing how to input bibliographic data, print barcode labels and book catalogues, and other general things in the collection processing process.

However, librarians and library managers continue to improve themselves by learning through friends who understand automation or other social media because if you want to understand technology, you have a limited amount of expertise about computers but enough to have high enthusiasm and willingness to learn new things. This is done for better library change and development. The development of library automation must at least have expertise in operating computers and have more than one personnel who are experts in their fields.

Then, about human resources who handle library automation, they do not have to have high expertise in computers, but enough staff who have high enthusiasm and willingness to learn about new things so that all process activities in processing collections through the SLiMS 9 Bulian automation system can be more effective and efficient overall.

#### b. Lack of Leadership Support

Leadership support is very strategic in building library automation. With the support of adequate leadership, library automation plans will work well. This support can be through funds, librarian competency development and moral support.

Implementing the SLiMS 9 Bulian automation system at SMP Negeri 1 Majene Library is also not optimal. This is because there are still several obstacles so that the system cannot be operated optimally, such as a lack of support in the form of funds for operational costs and library development, in this case, development for collection processing activities.

In addition, another thing that also influences determining library development policies is the head of the library, in this case, the head of the library, which is not from the library department but the teacher who acts as a leader so that the policymakers do not understand the urgency. Also, the development needs for libraries in schools.

The condition of a large number of existing library collections will take time and high costs in the automation process, so it requires significant support from all leaders in the school to produce automation-based library development in the use of the SLiMS 9 Bulian system more optimally. Leadership policies that still do not support innovations that will be carried out in libraries, such as in terms of funds requested for collection processing activities, are usually late because they have to adjust and follow school operational funds so that collection processing activities also run slowly.

With support from adequate leadership, library automation development plans will run optimally. Such support can be in the form of funding, staff competency development and moral support.

### c. Facilities and Infrastructure

One of the obstacles to implementing a library automation system is inadequate facilities and infrastructure. In this case, the SMP Negeri 1 Majene Library in processing collections using the SLiMS 9 Bulian system is not optimal because there are still several system-supporting facilities in processing collections in cataloguing activities that are not yet available, such as the need for scanning tools used as scanners for book cover images and book contents into bibliographic data fields for the collection processing process. Then scan the barcode which is also needed as a support so that the library automation system can entirely run optimally. The provision of laptops as input is minimal, so librarians have to take turns inputting books.

In addition, hosting or domain is also needed to make the SLiMS 9 Bulian system, which was initially still applied portably in inputting on one computer page, then can be operated optimally. It is known that the SLiMS 9 Bulian system not only facilitates the process of processing collections but also the process of circulation services and information retrieval systems. However, due to the lack of additional computer provision and the above facilities and infrastructure, it is still challenging to develop automation systems that have been implemented.

Therefore, procurement is needed so that the automation system can run well. Facilities and infrastructure planning is the entire process of carefully estimating the design of purchasing and procuring equipment by the needs to achieve the goals set for optimizing automation systems in libraries in the future.

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