

ANALYSIS OF THE IMPLEMENTATION OF LIBRARY AUTOMATION SYSTEMS USING SLIMS 9

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Abstract

This study investigates how the Diplomacy Library Automation of the Ministry of Foreign Affairs is implemented. The purpose of this study is to determine how the library automation system is implemented in the Diplomacy library using Slims 9, as well as to identify and overcome the obstacles that librarians face when implementing the library automation system. This study employs qualitative methods, including observation, interviews, and documentation. This study included interviews with librarians from the Diplomacy library of the Ministry of Foreign Affairs. Data analysis conducted during the research revealed that the use of the Senayan Library Management System (SLiMS) in the Diplomacy library of the Ministry of Foreign Affairs met aspects of the Technology Acceptance Model (TAM) theory. SLiMS is thought to be useful for library work, such as assisting users with information searches. According to the findings of this study, one of the most common challenges in processing SLiMS is that the internet network frequently fails or becomes unstable, which can impede the importing or searching process and necessitates a lengthy automation process.

Keywords: Automation SLiMS, Library Automation System, Library

INTRODUCTION

Libraries' roles in educational institutions have evolved over time as technology and information dissemination have advanced. Libraries play an important role in supporting increased student performance and knowledge, facilitating more efficient teaching and learning processes, and improving the overall quality of educational institutions. If library management was previously done manually by staff, the majority of these tasks have now been automated using information technology. The library automation system makes use of computers to manage various aspects of the library, such as taking notes, collecting data, printing, and creating reports. (Anggun et al., 2019)

Law Number 43 of 2007 concerning libraries describes a library as an institution that manages written, printed and recorded works to a professional standard, with the main aim of

meeting needs in the realms of education, research, preservation, providing information and entertainment for users. Article 12 of the law emphasizes that library collections must be organized, processed, stored, presented and expanded according to user needs, and must follow developments in information and communication technology. (Iskandar & Wijayanti, 2022)

The Diplomacy Library is part of the Ministry of Foreign Affairs and is located in South Jakarta, Jakarta Province's Special Capital Region. Prior to 2002, this library was known as the LITBANG Agency Library and was classified as echelon II until September 2002. After that, it was renamed BPPK library at the echelon III level. On October 19, 2002, it was renamed the Ali Alatas Library at echelon III level. On April 29, 2019, the name was changed to Diplomacy Library at the echelon III level. Despite the fact that the institution lacks a clear structure in 2021, this library remains an important provider of learning support facilities at the PUSDIKLAT of the Secretary General of the Ministry of Foreign Affairs.

The Diplomacy Library has integrated the SLiMS 9 application into its library automation system. With a collection of over 32,500 books, including 12,000 registered books, 150 international e-journals, and other resources, this library is an important resource for studying and understanding Indonesian foreign policy. The collection includes a variety of materials, including general knowledge, Ali Alatas' works, and Ministry of Foreign Affairs-related materials. The Diplomacy Library also relies on a variety of digital collections, such as the Digital Collection, Ministry of Foreign Affairs Publications, TASKAP-Individual Working Papers, History of Diplomacy, Electronic Books, and digital newspapers and magazines.

Initially, management of the automation system in the Diplomacy Library of the Ministry of Foreign Affairs was carried out manually. However, with the growth of collections and technological developments, the library chose to adopt an automation system application called Senayan Library Management System (SLiMS). The decision to use SLiMS by the Diplomacy Library of the Indonesian Ministry of Foreign Affairs was based on several reasons, including its open source nature and its ability to be adapted to suit needs. Other factors that influence this decision are the growth of library collections and the availability of human resources and infrastructure. Even though the Diplomacy Library of the Indonesian Ministry of Foreign Affairs has adequate human resources and facilities, it needs additional staff because it only has two professional librarian staff. Library facilities, including the building and facilities within it, are considered optimal with adequate space, computers for visitors, reading areas and Audio Visual rooms. The use of SLiMS by the Diplomacy Library of the Indonesian Ministry of Foreign Affairs began in 2009 and was upgraded to the SLiMS 9 version in 2020. The transition to SLiMS 9 aims to improve the quality of library services. The choice of SLiMS 9 was based on its success in increasing efficiency and speeding up librarian tasks. This application has proven effective in supporting library operational activities, simplifying information searches through OPAC, and providing support for librarians in carrying out their duties. The affordability and clarity of SLiMS 9 makes access easy for librarians and visitors.

Librarians at the Diplomacy Library of the Ministry of Foreign Affairs chose SLiMS 9 as an automation system because of its great value and ease of use. In the results of research interviews with related parties, it was revealed that the use of the SLiMS 9 application by librarians has an important role in carrying out various tasks in the library. Implementation of this automation system in the Diplomacy Library of the Indonesian Ministry of Foreign Affairs provides a number of benefits for library managers and users. Some of the benefits include speeding up the process of inputting book data in collection management, ease of monitoring processes in the Information Technology department, and ease for users in searching for

information on library materials through OPAC. Apart from that, the implementation of SLiMS 9 is also considered capable of improving the image or quality of the Indonesian Ministry of Foreign Affairs' Diplomacy Library and strengthening collaboration between the library and external parties outside the institution.

Initial observations at the Diplomacy Library of the Ministry of Foreign Affairs show that the implementation of SLiMS 9 has been running optimally, providing a significant impact on library management. Various facilities such as computers for visitors to access the OPAC, staff expertise in utilizing information search engines, as well as the availability of an Audio Visual room have been fulfilled. However, the challenges that are often faced are related to disruption or instability of the internet network which can hinder the process of inputting and searching for information, as well as slowing down data processing. When network disruption occurs, the library always coordinates with the Engineering department. Another obstacle is power outages from the center, which is overcome by providing generators, with priority on the loan section to continue serving users in the circulation process. The Diplomacy Library Management of the Ministry of Foreign Affairs has taken certain steps to overcome obstacles in implementing the library automation system. These steps include collaborating with the Information Technology and Engineering departments to handle server or network issues, coordinating with the facilities department to regulate the use of generators when there is a power outage from the main source and verifying data simultaneously to reduce data input errors.

Several Mataram Tourism College researchers, including Nurul Fikriati Ayu H and others, have compiled a study on the application of the library automation system, which is documented in the article "Application of the library automation system in improving services at the Mataram Tourism College library". The purpose of this study is to assess the impact of implementing an automation system on service quality at the STP Mataram Library UPT and to identify challenges that may arise during the implementation process. The research method used is descriptive, with an emphasis on the qualitative dimension. According to the research findings, the implementation of the automation system at the Mataram STP Library UPT is divided into several stages, beginning with the procurement process and ending with data input. Librarians have successfully used computers to manage library materials for tasks such as cataloguing, classification, and inventory. In accordance with the study's findings, the collections on the shelves are also organized by classification numbers. However, several challenges were identified while implementing the automation system at the STP Mataram Library. These barriers include facility constraints that limit the use of automation, network instability that impedes the automation process, and a lack of trained staff that stymies progress in the use of library automation. As a result, having staff who are skilled in computer operations is critical for developing an effective library automation system. (Hapsari et al., 2018)

Etik Nugrahawati from Bachelorwiyata Tamansiswa University, Indonesia, conducted research with the title "Optimizing Library Management through the SLiMS application at the Amrih Lantip Library at SDN Semanu III." The research aims to investigate the management of library services using SLiMS and identify strategies to overcome potential obstacles in managing SLiMS-based library services at the Amrih Lantip SDN Semanu III Library. The research method used is a qualitative approach with data collection through observation, interviews, literature study and documentation. The collected data was analyzed using qualitative analysis methods. The research results show that the implementation of the SLiMS automation system in the Amrih Lantip SDN Semanu III Library, especially in circulation services such as borrowing, returning, extending loan periods, and making membership cards, is considered to have reached

the optimal level. This success is related to the librarian's skill in using the search tools provided. However, there are still several challenges such as financial constraints and labor shortages, especially considering the significant number of students (Nugrahawati, 2021).

In this study, the researcher examined the implementation of the foreign ministry's diplomacy library automation system with slims 9. In this case, the researcher attempted to assess the efficacy of using the slims 9 application, which was applied to the library's automation system. Slims 9 is the most recent version of the application, following the development of the previous version. Slims 9 already has several advantages over the previous version, such as the ability to add Urdu, Turkish, and Russian to the interface, as well as the ability to add new page themes. admin (SchiLS-style admin theme), copy-cataloging feature using the MARC SRU protocol, and all available features are among the slims 9 application's advantages.

Library Automation

The term "automation" comes from the word "automatic," which comes from the English word "Automatic." This refers to processes that run independently. In the Big Indonesian Dictionary (KBBI), automation is explained as the use of machines to carry out and control tasks automatically without the presence of human supervision. Corbin (As quoted by Nahlah et al., 2021) explains library automation as the idea of a Human Machine System, which combines human capabilities with machine devices (computers) in managing libraries.

Library automation involves the use of information technology to complete administrative tasks in libraries. This includes activities such as procurement, processing, circulation (borrowing and returning), inventory, collection management, catalog recording, member management, and management of collections that are being borrowed. The aim is to improve the operational efficiency of the library and services to visitors. The application of automation not only increases library productivity and performance, but also reduces work demands on librarians and employees who are responsible for acquisitions, cataloging and circulation. This gives them wider opportunities to provide better services to visitors. (Doni, 2018)

Technological Acceptance Model (TAM) Theory

The theory supporting this research process is a technology acceptance model designed to evaluate the factors that influence the acceptance of computer technology. The Technology Acceptance Model (TAM) is an adaptation of the Theory of Reasoned Action (TRA) which was first introduced by Davis in 1989. This model provides a basis for a deeper understanding of user behavior in accepting and utilizing information systems.

In TAM, there are five variables which include perceived practicality of use (PEOU), perceived value (PU), ATU, intention to use (ITU), and actual use of the system (ASU). (Lagatari & Sufa'atin, 2015)

RESEARCH METHOD

The implementation of SLiMS 9 in the Ministry of Foreign Affairs' Diplomacy Library Automation System is evaluated in this study using qualitative descriptive methods. Research informants include members of the PPE Division, librarians, and visitors with relevant connections to the issue under investigation.

Table 1. Research Informants

Source	Position	Units
Informant 1	Librarian	Processing Field
Informant 2	Librarian	Processing Field

Source: Ministry of Foreign Affairs Diplomacy Library

The research method used is qualitative, with a focus on analyzing the Diplomacy Library's implementation of the library automation system, SLiMS 9. The goal is to identify the challenges faced by librarians and the strategies used to overcome them. Data was collected from two sources: primary data from program participants such as librarians, visitors, and community members, and secondary data from historical documents and activities related to the library's SLiMS 9 implementation.

Data collection methods included direct meetings with informants in the Diplomacy Library as well as observation of program-related documents. Data was analyzed qualitatively in three stages: reduction, presentation, and conclusion. Data were validated using source triangulation, which compares information from interviews, observations, and documents to ensure accuracy. The primary goal of this study is to provide a thorough overview of the role of programs in implementing library automation systems.

RESULT AND DISCUSSION

TAM is a theory used to assess the acceptance of an information system by studying how information technology is received using a behavioral approach. To investigate the acceptance of information systems in libraries using the TAM model, five variables are the main considerations: (Zainal, 2015).

Level of convenience / Perceived Ease of Use (PEOU)

As explained in the Technology Acceptance Model (TAM), various factors influence software adoption, with ease of use being the most important factor in the acceptance of a technology product (Dirmansyah et al, 2023). In the context of SLiMS, ease includes not only its use but also the ease with which it can be learned and operated. According to the results of interviews with the Librarian of the Indonesian Ministry of Foreign Affairs' Diplomacy Library, the implementation of SLiMS in the library provides convenience for frequent library users. SLiMS is simple to use even for novice users. Librarians find it useful in a variety of activities, including processing and circulating library materials, because SLiMS features are easy to learn. When faced with a challenge, librarians can use the internet to find learning resources to help them better understand SLiMS.

Level of usefulness / Perceived Usefulness (PU)

Based on interviews with the Indonesian Ministry of Foreign Affairs Diplomacy Library Librarian, library managers believe that using SLiMS provides a number of significant benefits. Librarians find the services and features in SLiMS very useful and easy to understand. Librarians reported that the presence of the SLiMS application in the Library has accelerated their work. Librarians, for example, can easily use SLiMS's various features to assist with collection management and library borrowing processes. Visitors also appreciate SLiMS's ease of use,

particularly when searching for books or other materials via the OPAC menu (Ridlo et al, 2023). Although not all staff members are equally skilled at using SLiMS due to their diverse educational backgrounds in library science, some may still need to adapt to this information technology.

Attitude Toward Using (ATU)

To improve SLiMS's acceptance in the automation process, it is critical to understand user attitudes and establish effective communication channels with them. If users see that SLiMS provides tangible benefits, such as improved information access or easier collection tracking, they are more likely to be enthusiastic about using the system. Interviews with librarians at the Diplomacy Library of the Indonesian Ministry of Foreign Affairs reveal that they have a positive attitude toward SLiMS because it greatly assists them in managing the library, including report creation and easy understanding of its features. For example, librarians can easily use SLiMS menus to support a variety of processes, such as library material processing and circulation.

Behavioral Intention to Use (ITU)

Since the implementation of SLiMS, the process of managing library materials in libraries, which was previously complex and time-consuming, has become simpler. Visitors who search for collections benefit from this convenience as well. They no longer have to manually search for books on the shelves or ask library staff. With OPAC integrated into SLiMS, visitors can easily find the book they're looking for and know where it's on the shelves. This implies that the benefits provided by SLiMS in the Diplomacy Library of the Indonesian Ministry of Foreign Affairs encourage library staff to continue using it as a tool in carrying out their duties in the library.

The use of SLiMS in the Diplomacy Library of the Indonesian Ministry of Foreign Affairs simplifies library material management, facilitates information searches, accelerates task completion, and improves librarian performance. Thus, the convenience provided by SLiMS in library collection management influences user interest in continuing to use this information system, increasing the process's speed and efficiency. The decision to implement SLiMS as an information system was deemed appropriate, especially given the large volume of library materials owned by the library. Interviews with librarians from the Indonesian Ministry of Foreign Affairs' Diplomacy Library revealed that library managers intend to continue using SLiMS because it is simple to use and can speed up their daily tasks.

Actual System Usage (ASU)

Interviews with librarians at the Diplomacy Library of the Indonesian Ministry of Foreign Affairs show that implementing SLiMS to manage library materials has resulted in increased library process efficiency. The use of SLiMS in daily library activities has a positive impact because it ensures smooth operations and reduces the possibility of errors. Although computers were previously used to manage library activities, the presence of SLiMS contributes significantly to reducing reliance on library staff. However, there are some difficulties in using SLiMS, particularly when the internet network is unstable and errors occur in SLiMS during use. This constraint makes it difficult for staff to run SLiMS during library activities.

It is recognized that using computer technology to process library materials can speed up the process, despite the possibility of user errors. Since the implementation of SLiMS in libraries, the risk of such errors has been reduced because SLiMS acts as an automatic processor

of data entered by users, and the SLiMS application follows the Technological Acceptance Model (TAM) theory. This TAM theory emphasizes the use of an information system as the foundation for a thorough understanding of an application's users. As a result, it is possible to conclude that implementing SLiMS in libraries improves library materials management. The current method of managing library materials is faster and more efficient than the previous manual approach. For example, SLiMS can present library activity reports and provide easily accessible information, such as the number of collections available. The implementation of SLiMS in libraries has been demonstrated to be effective, providing benefits and assistance in carrying out library tasks.

CONCLUSION

The overall impact of SLiMS implementation in the Diplomacy Library of the Indonesian Ministry of Foreign Affairs has been positive, with increased operational efficiency and user services. SLiMS not only reduces workload in various library divisions such as acquisitions, cataloging, and circulation, but it also allows staff to provide better services to visitors. Using SLiMS provides numerous benefits, including increased work speed, improved performance, and increased productivity. However, there are still challenges, particularly when network disruptions or instability occur, which slow down the process of inputting and searching for information, resulting in a longer automation process.

SUGGESTION

Based on these conclusions, the researcher recommends that the Diplomacy Library of the Ministry of Foreign Affairs increase the efficiency of using the Senayan Library Management System (SLiMS) application by implementing the following actions:

1. It is necessary to improve the quality of the network used in the Diplomacy Library of the Ministry of Foreign Affairs to support the optimization of the SLiMS application. Good availability of the network has a significant impact on SLiMS operations.
2. In the Diplomacy Library of the Ministry of Foreign Affairs, it is recommended to add personnel who have expertise in the information sector to handle potential system problems and improve the quality of the SLiMS application program.
3. It is recommended to increase the number of library employees who have education related to the library field in the Diplomacy Library of the Ministry of Foreign Affairs to improve the processing of library materials using SLiMS more efficiently.

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