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An Analysis of Library Electronic User Satisfaction Using Slims in GKJ Synode with Qualitative Descriptive Method

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A B S T R A C T

This research aims to:1) Knowing satisfaction of electronic library users using SLiMS at the GKJ Synod with a qualitative descriptive method.2) Knowing the obstacles faced in implementing SLiMS at the GKJ Synod with a qualitative descriptive method.This research is a type of field research (*field research)*descriptive. The results showed that:1) System quality satisfaction, namely SLiMS facilitates the work of librarians in managing libraries automatically and helps librarians work; 2) Information quality satisfaction, namely SLiMS is very easy to understand and understand by its users so that it does not take a long time to understand the contents of the information from SLiMS; 3) System usability satisfaction (perceived usefulness); namely SLiMS can complete work quickly and easily because SLiMS makes it easy to manage libraries; 4) Perceived ease of use, namely SLiMS is easy to obtain and easy to use because of its simplicity in appearance and the menus contained therein are quite easy to understand; and 5) Satisfaction of information systems (information systems satisfaction), that is, the output produced by SLiMS corresponds to what already exists in the form of report information that is usually needed in the library.

1. Introduction

Information technology in libraries has now developed and has an impact on the service systems provided to library users. One of the most prominent technological changes in library services is the automation system used. In addition, libraries that are managed manually have switched to digital libraries or Cyber Libraries. Library automation technology is one of the important things in information retrieval. Library automation makes it very easy for users to browse information and library automation technology can also be used simultaneously. Library automation is a system that utilizes information technology (IT), especially the use of computers to carry out routine daily activities carried out in the library. Libraries as one of the institutions that provide information for their users certainly rely heavily on information technology in providing services to library users. With automation, the library hopes to be able to improve the quality of service to library users and improve the book processing system in the library.

The GKJ Synod Library is an educational service and information center for students, prospective pastors, and for the public to gain insight and gain information. The GKJ Synod Library is one of the official components of the Javanese Christian Church in Indonesia. This library was established with the aim of being a means of supporting obtaining additional knowledge from the books contained in the library.

In an effort to improve service performance, the use of information systems is an alternative or the right solution. The reasons for using information systems include: 1) greater processing speed 2) better accuracy and consistency, 3) faster information attainment, 4) reduced costs, 5) better security.[1]Therefore, the GKJ Synod Library must be able to carry out educational activities in its operational activities. The aim is that all the facilities and facilities of the GKJ Synod library can be used appropriately and beneficial so that the budget spent in the provision of facilities and facilities is not wasted.

Currently, the GKJ Synod Library has a large number of book collections. According to the records of September 2020, there are 438 books in the GKJ Synod Library. This made the GKJ library have to develop

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the Senayan Library Management System (SLiMS) to meet the library management automation needs (library automation) in the GKJ Synod Library.

The SLiMS application as a library management system software has become an open source licensed under the GPL v3. This application was first developed and used by the Library of the Ministry of National Education, Center for Information and Public Relations, Ministry of National Education. The SLIMS application was built using PHP (Hypertext Prepocessor), MySQL (My Structured Query Language) database, and a Git version controller. In 2009, SLiMS was awarded the first level in the INAICTA 2009 event for the open source category. Since it was first introduced to the public, many libraries have used it as a support for the collection search system in the library.[2]

SLiMS is an application for managing information and can be accessed easily by inputting data into the application. [3]This application can be developed in several versions, making it easier for administrative activities in the library. With the SliMS application, the GKJ Synod library can improve technology mastery in terms of optimal collection management and maintenance. This system can be obtained free of charge and can run on windows and linux operating systems, has complete documentation, and has clear development prospects.

The SLiMS software is able to carry out administrative functions in the library, such as processing loans, repayments, member management and various types of reports, both monthly and annual reports. This software can also assist library management in making policies for procurement of books or library equipment and can also be used as material for consideration in making decisions for the library. All of these activities can be done using the menus provided by this software. With this device, it can make it easier for the librarian / librarian to use this system.

2. Literature review

The first previous research entitled "Designing a Library Information System Based on a Web Application". This study discusses the library management system as a contribution to the development of automation in membership data processing, circulation and cataloging. The system resulted from this development has the advantage of using lending, membership and cataloging applications that are shareable via the internet, so that these applications can be used together. Catalog information can be conveyed between libraries, without leaving the function of the digital library in the use of digital resources that are uploaded by each librarian.[4]

The second previous research entitled "Analysis and Development of the Senayan Library Management System (SLiMS) at the Budiah Binti A. Wahab Library, Universitas Ubudiyah Indonesia". This system was developed to make it easier for libraries to manage library collections and library members as well as reporting.[5]

The third previous research entitled "Laravel Framework Web-Based Library Information System Development". The software development process uses the waterfall model which consists of four stages, (1) needs analysis; (2) Design; (3) Implementation; and (4) Testing. This software has features as a library information system such as management of borrowing and managing books, library information and making reports.[6]

Based on the three previous studies, a study was conducted to analyze the satisfaction of electronic library users using SLiMS. This system was built so that users can access library services without having to come to the library. Users can access the services provided by the library via the web or the library portal.

Digital Library(DL) is an organized and interconnected collection of information in which this information can be stored, accessed, manipulated and displayed electronically. The information stored can be in the form of text, graphics, animation, video or a combination thereof, which can be accessed locally (the organization itself) or via the internet. The concept of 'Digital Library' itself is actually not a new concept, but recently it has returned to be an option for actors in the world of libraries to be 'occupied' and displayed to users.[7]

*Senayan Library management System*or in short, SLiMS is a web-based free open source software (FOSS) that can be used to build library automation systems. As a software, SLiMS is able to run perfectly on a local network system (internet). Currently SLiMS is in great demand among Indonesian people, especially librarians, because the facilities it has can meet the needs of an automation system in the library. By using SLiMS, users can access library information services much faster than when it is manual. In

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addition, the SLiMS software can be accessed via internet access, so that users can browse the library catalog from anywhere and anytime through the website or portal provided by the library.[6] SLiMS is designed to manage library collections according to the International Standard Bibliographic Description (ISBD) based on the Anglo American Cataloging Rules (AACR2) level 2. This standard is commonly used throughout the world. [8]

Satisfaction is the level of a person's feelings after comparing the perceived performance or outcome with his expectations for the product. [9]In terms of the quantity of electronic library user satisfaction, it includes the types and the number of services that can be provided to these users. The satisfaction of library electronic users includes: 1) System quality satisfaction, namely the ability or performance of the system in providing information according to user needs; 2) Information quality satisfaction, namely the quality of information is the quality of output in the form of information generated by the information system used; 3) System usability satisfaction (perceived usefulness), usefulness as a level where someone believes that the use of a certain subject will be able to increase the person's work performance; 4) Satisfaction of the ease of the system (perceived ease of use), the level of individual confidence that the use of technology will improve their performance, and the perceived ease of use is the level of individual confidence that the use of technology makes it easier to get work done; and 5) Satisfaction of information systems (information systems satisfaction).[10]

3. Research Methods

This research is a type of field research (field research). In this study, researchers tried to express and describe factually and actually systematically about the satisfaction of electronic library users using SLiMS at the GKJ Synod. Judging from its nature, this research is descriptive. So, this type of research seeks to understand and interpret an event of human behavior interaction in certain situations according to the researchers themselves. Descriptive can be defined as a problem-solving procedure that is investigated by describing or describing the current state of the subject or research object in the visible facts.

The research pattern that researchers use is a qualitative pattern. This research was conducted at the GKJ Salatiga Synod Library which is located at Jalan P Diponegoro Number 55, Salatiga. The time of this research was September 2020-January 2021. The research subjects who were used as research informants were people who were directly involved in the use of SLiMS at the GKJ Synod. Informants in this study were limited, considering that the objectives to be achieved in this study were based on the consideration that the informants were judged to be able to provide valid, accurate, and reliable data related to the satisfaction of library electronic users using SLiMS at the GKJ Synod. This study took primary data sources from electronic users of the GKJ Salatiga Synod library, namely librarians. Data collection techniques used in this study were interviews, observation, and documentation. Researchers used the data analysis model of Miles and Huberman which includes three stages, namely data reduction, data display, and drawing conclusions.

4. Results and Discussion

4.1 Research result

The data found in the field are the results obtained through descriptive qualitative research. This data is indispensable for consideration of the findings in the field and the theory used in relation to the research discussion. The stages of data analysis used include:

a. Data reduction

   Based on the results of interviews and observations during the study, the following are the results of data reduction needed in accordance with the purpose of conducting research on the satisfaction of library electronic users using SLiMS at the GKJ Synod.

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Table 1.
Research Data Reduction

No.	Respondents	Informant Code	Interview result
1	Astuti Handayani	P1	a. SLiMS is software that is easy to use for both library managers and libraries. b. SLiMS can increase work performance. c. The existing SLiMS program is quite clear and easy to understand. d. The obstacles we face in implementing SLiMS include HR.
2	Mugito	P2	a. The SLiMS application has features that are useful for library evaluation. b. SLiMS is an open source software where the information generated is general so that we can modify it according to library needs. c. The existing SLiMS program is clear and easy. d. SLiMS has a problem, namely that not all plugins are provided by the community.
3	Yuni Kristiyatun	P3	a. SLiMS is an open source software developed by the government. b. SLiMS can save time in doing work. c. The menus contained in SLiMS are easy to understand. d. Lack of training related to SLiMS.
4	Dinda Eira Rahmawati	M1	a. SLiMS makes it easy to find books. b. SLiMS trains discipline because the payback period cannot be deceived. c. SLiMS accelerates librarian services.
5	Yohanes Firda K	M2	a. SLiMS provides maximum quality for its members. b. Makes it easy when borrowing books. c. Members do not bother in looking for books, even though the books they are looking for are years old.

b. Display Data

The presentation of the data is directed so that the data resulting from the reduction are organized, arranged in a relationship pattern so that it is easier to understand. In this step, the researcher compiles the relevant data so that it becomes information that can be concluded and has a certain meaning. The process can be done by displaying data, making relationships between phenomena to interpret what actually happened and what needs to be followed up to achieve the research objectives. Good data presentation is an important step towards achieving a valid qualitative analysis.

Table 2.
Display of Research Data

No.	Electronic User Satisfaction Indicators	Respondents	Answer
1	System Quality Satisfaction	P1	SLiMS to help with activities in the library without experiencing difficulties.
		P2	Ease of use of SLiMS.
		P3	SLiMS can save time.
2	Information quality satisfaction	P1	SLiMS helps provide maximum information to its members.
		P2	SLiMS increases work efficiency.

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No.	Electronic User Satisfaction Indicators	Respondents	Answer
		P3	Improve the quality of its users.
3	Perceived usefulness	P1	The use of SLiMS makes librarians more focused on library development.
		P2	Librarians are more productive.
		P3	Easy to browse SLiMS features.
4	System ease satisfaction (perceived ease of use)	P1	Easy to use.
		P2	The menu that is displayed is clear and easy to understand.
		P3	Integrated software system.
5	Information systems satisfaction	P1	Be accurate in providing information.
		P2	Providing maximum service for library members
		P3	The information provided is based on clear facts.

c. Conclusion Withdrawal

The following is the stage of drawing conclusions based on the research findings.

Table 3.
Withdrawal of Research Conclusions

No.	Electronic User Satisfaction Indicators	Conclusion
1	System Quality Satisfaction	SLiMS is an easy to use software.
2	Information quality satisfaction	The information generated by SLiMS is easy to accept or understand.
3	Perceived usefulness	SLiMS can complete work quickly and easily because SLiMS makes it easy to manage libraries.
4	System ease satisfaction (perceived ease of use)	SLiMS operation is easy.
5	Information systems satisfaction	The output produced by SLiMS meets the needs of its users.

4.2 Discussion

The following describes the presentation of data based on the interview process that has been conducted with the informants. The analysis was carried out by comparing the findings of the interview data with other references in accordance with the aspects analyzed.

a. Satisfaction of Library Electronic Users Using SLiMS at the GKJ Synod

Satisfaction of electronic library users using SLiMS at the GKJ Synod includes: 1) System quality satisfaction; 2) Information quality satisfaction (information quality); 3) Satisfaction of system usability (perceived usefulness), 4) Satisfaction of system ease (perceived ease of use); and 5) Satisfaction of information systems (information systems satisfaction).

1) System Quality Satisfaction

The results of data analysis regarding system quality satisfaction in electronic library users using SLiMS at the GKJ Synod are: (1) Complete features provided by SLiMS, (2) SLiMS response speed in executing commands, (3) SLiMS stability.

Based on the results of interviews with several informants about the features available at SLiMS, it was said that most librarians of the GKJ Synod library felt helped by the features provided by SLiMS. This feature can facilitate the work of librarians in managing libraries automatically and helping librarians work. This was disclosed by Mr. Astuti Handayani as the Library Service Staff:

"Yes, in my opinion, SLiMS is software that is easy to use. Both library managers and visitors can use SLiMS to help activities in the library without experiencing difficulties, both to learn and use it".

SLiMS provides various features to make it easier for users or librarians to manage libraries. These features include OPAC, bibliography, membership circulation, inventory, reporting, and serialization controls. All of these features have been widely used by librarians in GKJ Synod

libraries throughout Indonesia. Most of the electronic users of the GKJ Synod library have used all the features available in SLiMS. This feature is used in accordance with the librarian jobdesk so that not all librarians carry out the features available in SLiMS. However, overall the features available in SLiMS have been utilized in managing libraries. This was conveyed by the Library Service Staff, namely Mr. Mugito in the following interview:

"In my opinion, the SLiMS application has a useful feature as a library evaluation, namely reports. The reports available on the SLiMS software include Visitor Statistics. With this feature, the library can find out the number of library users who visit the library. Menus contained in the report module are collection statistics, loan reports, membership statistics. The reporting facility provided by the SLiMS software can help us in preparing library performance reports.

The results of the author's interview with the librarian at the GKJ Synod library said that there had never been an error with the SLiMS feature it was running. Disruptions to the SLiMS feature can be influenced by various factors, both in the SLiMS software that has not been updated to human errors. SLiMS software in carrying out its duties is able to respond quickly. In this study, it is proven that the performance of SLiMS has a good quality system because it is able to respond quickly to every job. because it can cut the time needed in a job such as accelerating in terms of making the completeness of the book.

According to most informants, SLiMS is able to meet all the needs in managing libraries in the GKJ Synod library. The informants felt that SLiMS was able to meet all the needs in managing the library. SLiMS as an open source software can be integrated with other software by slightly changing the coding so that it is able to collaborate with other software. However, not all compatible software runs hand in hand with SLiMS. This statement was supported by a library service staff member, Mrs. Yuni Kristiyatun in the following interview:

"SLiMS is an open source software developed by the government, so for updates you will not worry about going bankrupt, because the developer is clear. Then to move data is very easy because there are advantages in moving data. SLiMS is also easy to use, and there are many libraries that use SLiMS so there are already many communities ".

2) Information Quality Satisfaction

Data analysis related to information quality satisfaction includes: (1) information generated according to needs, (2) completeness of the resulting information, (3) authority of the resulting information, (4) timeliness of the information generated.

According to the informant, SLiMS software is able to provide complete information needed so that the quality of information available on SLiMS is sufficient. Apart from being complete, the information contained in SLiMS is very easy for users to understand or understand, so it doesn't take a long time to understand the contents of the information from SLiMS. All informants said that the information produced by SLiMS was easy to accept or understand. This was explained by the Library Service Staff, namely Mr. Mugito in the following interview:

"SLiMS is an open source software in which the information generated is general in nature so that we can modify it according to library needs". [17]

In this case there is still some information that has not been facilitated by SLiMS so that libraries are expected to be able to develop SLiMS according to library needs. However, overall the information contained in SLiMS already represents all the information needed by the library in general. The results of interviews with several informants show that SLiMS has an information authority in which the resulting information can be guaranteed. Data duplication of information on SLiMS cannot occur because SLiMS has a premier key where data cannot be the same as one another so that the SLiMS software does not occur data duplication. Information generated by SLiMS can be provided quickly and in a timely manner.

3) Perceived Usefulness

The data findings about system usability satisfaction include: (1) SLiMS is useful in work, (2) SLiMS can help complete tasks quickly, (3) SLiMS can improve work performance. SLiMS can complete work quickly and easily because SLiMS makes it easy to manage libraries. All library activities can be managed using SLiMS. As explained by Br Astuti Handayani, as follows:

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"The existence of SLiMS can improve work performance because the time needed to complete tasks is faster so that productivity can increase".

Mrs. Yuni Kristiyatun also explained:

"SLiMS can save time in doing work because there is a system that works double in every activity carried out by us as librarians in matters relating to information retrieval".

Before using the SLiMS automation system, librarians felt overwhelmed because everything had to be done manually, including the process of borrowing, returning and storing data. After starting to use the SLiMS automation system, librarians can save more time in the process of all things related to information retrieval, especially what has been done such as data collection, printing book labels, book barcodes and opening library membership cards.

4) Satisfaction Ease of System (Perceived Ease Of Use)

The results of data analysis about perceived ease of use are SLiMS easy to learn and SLiMS easy to operate.

In general, learning SLiMS does not take a long time because all the information contained in SLiMS is clear and generally understandable for librarians who have a library education background. However, there were also librarians who took a long time to study SLiMS because these respondents did not have a library education background.

SLiMS operation can be said to be easy. From the research results, librarians are more dominant in saying that the operation of SLiMS does not experience difficulties. Good software, in fact, must be user friendly in operation because it doesn't confuse the user and the software can help the user's work without any difficulties in operation. This was conveyed by Mr. Astuti Handayani in the following interview:

"The programs in SLiMS are quite clear and easy for us to understand as librarians. SLiMS is easy to find and easy to use because of its simplicity in appearance and the menus contained therein are quite easy to understand, especially for those who are familiar with the library field.

The library also hopes that in the future, by implementing SLiMS, collections in the library can be published through the portal owned by the GKJ Synod library.

5) Information Systems Satisfaction

Data analysis related to information system satisfaction includes the output produced, the quality of the documents produced and the dependence on the use of SLiMS. The output produced by SLiMS corresponds to what already exists in the form of report information that is usually needed in the library. The overall output produced by SLiMS is general. Overall, the output produced by SLiMS has met the needs, but there are some additional details or information that need to be added according to the needs of the library. The majority of informants thought that the output produced by SLiMS was appropriate. The output produced by SLiMS can be a document containing information on books in the library.

Librarian is an information manager in which not only library materials in the form of print are managed, but also digital library materials. The existence of SLiMS really helps librarians work because with SLiMS librarians are able to manage libraries easily. The majority of informants think that SLiMS can help librarians work. And librarians who use SLiMS feel satisfied because it makes it easier to manage libraries using SLiMS.

b. Constraints Faced in the Implementation of SLiMS at the GKJ Synod

SLiMS as open source software has various general features and sometimes not all library needs can be fulfilled. Therefore, the development of SLiMS needs to be done in every library in order to meet all the needs of the library. Developing SLiMS was not easy. According to the results of the interview, it can be seen that the obstacles in developing SLiMS include the absence of programming skills. As stated by Mr Mugito in the following interview:

"SLiMS also has a problem, namely that not all plugins provided by the community can be installed simultaneously and do not understand the PHP language that is in SLiMS. So that it takes a long time to realize the desired feature additions ".

Apart from that, the ability of library managers must also be improved. So far, most managers are adept at using SLiMS only on menus related to their field of work. Library managers still have to try a little harder to use the menus in SLiMS that they are not used to. Another obstacle is the lack of personal

computers. This is due to the lack of attention to related parties regarding operational development in the library so that the implementation of the SLiMS automation system has not been optimal.
This was conveyed by Mr. Astuti Handayani in the following interview:
"In my opinion, the obstacles we face in implementing SLiMS include human resources. The ability to master various competencies in the features of technology applications is certainly not easy to learn independently by librarians. In this regard, it is necessary to provide education and training on the SLiMS automation system. By providing training, we hope that the library staff regarding the automation system will increase. In addition, with the training, the staff's interest in information technology applications is high, and the image of a librarian has increased ".

5. Conclusions

Based on the results of research and discussion related to the satisfaction analysis of electronic library users using SLiMS at the GKJ Synod, it can be concluded that the electronic users of the GKJ Synod library are satisfied using SLiMS. Satisfaction of electronic library users using SLiMS at the GKJ Synod includes: 1) System quality satisfaction, namely SLiMS facilitates the work of librarians in managing libraries automatically and helps librarians work; 2) Information quality satisfaction, namely SLiMS is very easy to understand and understand by its users so that it does not take a long time to understand the contents of the information from SLiMS; 3) System usability satisfaction (perceived usefulness); namely SLiMS can complete work quickly and easily because SLiMS makes it easy to manage libraries; 4) Perceived ease of use, namely SLiMS is easy to obtain and easy to use because of its simplicity in appearance and the menus contained therein are quite easy to understand; and 5) Information systems satisfaction, namely the output produced by SLiMS in accordance with what already exists in the form of report information that is usually needed in the library.

Based on the above conclusions, the authors suggest to the GKJ Synod library to carry out coaching or training for librarians at the GKJ Synod library on how to use the SLiMS automation system so that its implementation can be effective. In addition, the GKJ Synod library should have a SLiMS structure or guide so that its implementation can run smoothly.

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