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EVALUATION OF THE SISTER APPLICATION IMPLEMENTATION IN SUPPORTING THE ACADEMIC PERFORMANCE OF LECTURERS AT IAI AL-HIDAYAH BOGOR

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ABSTRACT

The Integrated Resource Information System (SISTER) is an application developed by the Ministry of Education, Culture, Research, and Technology to support integrated lecturer data governance across all higher education institutions in Indonesia. This study aims to evaluate the implementation of the SISTER application in supporting lecturers' academic performance, particularly in terms of managing data on the tridharma of higher education, such as education, research, and community service carried out by lecturers at IAI Al-Hidayah Bogor. The method used is a qualitative descriptive case study at IAI Al-Hidayah, Bogor. Data were collected through interviews, observations, and questionnaires with lecturers who use the SISTER application at IAI Al-Hidayah Bogor. The evaluation results show that in general, SISTER provides convenience in recording and reporting academic activities, but there are still several obstacles such as a suboptimal user interface, imperfect data integration, and the need for further training for lecturers. These findings underscore the importance of continuously improving the SISTER application to better support lecturers' academic performance and enhance higher education governance in Indonesia.

A. INTRODUCTION

The development of information and communication technology (ICT) has had an impact on the field of education in the learning process. The use of ICT in the learning process is no longer a strange thing in the current era of globalization (Akbar & Noviani, 2019). The development of information technology has brought significant changes in administrative governance in various sectors, including higher education. In this context, the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia launched the Integrated Resource Information System (SISTER) application as part of the national effort to digitize lecturer data. This application aims

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to unify all data on lecturers' tridharma activities, including education, research, and community service, into one integrated, transparent, and easily accessible system.

The SISTER application was officially launched in 2017 by the Ministry of Research, Technology, and Higher Education (Kemenristekdikti), now known as the Ministry of Education, Culture, Research, and Technology (Kemendikbudristekdikti). This application aims to manage data and various processes related to lecturers, including portfolios, data changes, and lecturer ranks/careers, as well as reporting on the Tridharma of Higher Education (teaching, research, and community service). The Cloud version of SISTER, which uses cloud-based technology, has also been released to make it easier for lecturers and higher education institutions to access these services. SISTER Cloud was launched in 2023.

SISTER Cloud (SISTER Cloud version) is a SISTER application that is already Cloud-based so that all data inputted by lecturers and university operators are automatically stored in the Cloud or online storage media. All data inputted by lecturers such as lecturer data, performance through LKD, and so on will automatically be stored in the central storage space managed by the Ministry of Education, Culture, Research, Technology and Higher Education. Unlike the previous version of SISTER, lecturer service administration data is not synchronized between SISTER universities and central SISTER at the Directorate General of Higher Education. Previously, data input by lecturers was stored in the information system of each university, then forwarded by the university operator to the center (kemdiktisaintek.go.id, nd) .

The use of SISTER is expected to improve efficiency, accuracy, and accountability in managing lecturer performance, as well as accelerate various administrative processes previously performed manually. Furthermore, this system also plays a strategic role in supporting lecturer career development policies, such as the process of submitting functional positions, lecturer certification, and reporting Lecturer Workload (BKD). However, in its implementation, several challenges remain that affect its effectiveness, including limited infrastructure, low digital literacy among lecturers, and obstacles in data integration between systems.

Given the importance of SISTER's role in supporting lecturers' academic performance, an evaluation of its implementation within the university environment, particularly at IAI Al-Hidayah Bogor , is necessary . This evaluation aims to assess the extent to which the SISTER application has fulfilled its function, identify obstacles faced by users, and provide recommendations for improvements to optimize the system. Thus, it is hoped that the SISTER application will not only be an administrative tool but also a strategic instrument in improving the quality of higher education at IAI Al-Hidayah Bogor .

As one of the private Islamic universities in Indonesia, IAI Al-Hidayah Bogor has begun implementing the SISTER application to support lecturer performance reporting and evaluation. However, the effectiveness of this application on campus still requires further study. Some common challenges in using similar applications include a lack of technical training, limited available information, user resistance, and suboptimal information technology infrastructure.

At IAI Al-Hidayah, the use of the SISTER app began in 2023, with outreach and training for all lecturers by the campus operations team. However, since its implementation, lecturers have encountered various challenges, from creating accounts to understanding the app's features.

Thus, evaluating the implementation of the SISTER application at IAI Al-Hidayah Bogor is crucial for assessing the extent to which this application is able to support the improvement of lecturers' academic performance. This evaluation aims not only to describe the benefits and challenges encountered, but also to serve as a basis for formulating more effective internal policies to improve the quality of human resources within the university.

B. RESEARCH METHODS

This study employed a descriptive qualitative approach. This approach was chosen to gain a deeper understanding of how the implementation of the SISTER (Integrated Resource Information System) application supports the academic performance of lecturers at IAI Al-Hidayah Bogor. Qualitative research allows researchers to more comprehensively explore the experiences, perceptions, and challenges faced by lecturers and academic administrators in using the SISTER application.

This research was conducted at the Al-Hidayah Islamic College (IAI) in Bogor. This location was chosen based on the institution's implementation of the SISTER application for managing lecturer data and academic activities. The research is scheduled for July 2025.

Data collection techniques in this study include: 1) In-depth interviews , 2) Participatory observation: Researchers directly observed the process of using the SISTER application in administrative activities and reporting lecturers' academic performance, and 3) Documentation study: Collecting related documents, such as lecturer performance reports, SISTER application usage guidelines, and institutional policies related to the application's implementation.

C. LITERATURE REVIEW

1. SISTER App

SISTER is an application used to store administrative data on lecturer services. Now, with a cloud-based information system, all lecturer service data can be automatically collected in a single system (kemdiktisaintek.go.id, nd) .

SISTER (Integrated Resource Information System) is a digital platform developed by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia (Kemendikbudristek) to manage human resource data and information in higher education, especially lecturers (SEVIMA , nd) .

Main Functions of SISTER Application:

a. Lecturer Data Integration

Uniting various academic and administrative information of lecturers, such as educational history, functional positions, research, community service, training, and certification in one integrated system.

b. Academic and Career Services Support for Lecturers

Simplifying administrative processes such as: Submission of functional positions, Lecturer certification, Lecturer Workload Reporting (BKD), and Proposals for promotion.

c. Transparency and Accountability

Improve the accuracy and transparency of lecturer data used by the government and universities for evaluation and policy.

d. National Synchronization

SISTER is connected to central systems such as PDDikti (Higher Education Database), so that data input by lecturers or institutions is automatically synchronized to the national database.

Purpose of Using SISTER

- a. Improving the efficiency of human resource management in higher education.
- b. Make it easier for lecturers and administrators in the academic reporting process.
- c. Providing valid data for planning and decision-making at the institutional and ministerial levels.

2. Academic Performance of Lecturers

Performance is the execution of the functions required of an individual. Performance refers to the work results, abilities, or achievements of employees and lecturers, or the motivation to carry out a task (Razak et al., 2016). Lecturer academic performance refers to the achievement of the Tri Dharma of Higher Education, namely education, research, and community service. This performance evaluation is important as a basis for assessing credit points and functional position levels. Lecturer academic performance can be detailed as follows:

Education and Teaching

- a. Quality in delivering lecture material.
- b. Planning and implementation of learning.
- c. Development of teaching materials.
- d. Student guidance (thesis, dissertation).

Study

- a. Number and quality of scientific publications (national and international journals).
- b. Involvement in research projects.
- c. Publication of books or other scientific works.
- d. Awards or recognition for research results.

Community Service

- a. Activities that have a direct impact on the community.
- b. Training, counseling, or collaboration with external agencies.
- c. The application of science to solve social or economic problems.

Academic Support Tasks

- a. Organizational activities on campus (becoming head of study program, dean, etc.).
- b. Become a journal reviewer or speaker at a seminar.
- c. Membership in professional organizations.
- d. Certification and training attended.

Lecturer Academic Performance Assessment

- a. Performance appraisals are usually conducted periodically (e.g. every semester or year) and can be used to:
- b. Promotion of functional positions (for example from Lecturer to Senior Lecturer).
- c. Workload evaluation (BKD – Lecturer Workload).
- d. Provision of allowances or incentives.
- e. Career development planning.

From the discussion above, SISTER's role in supporting the Tri Dharma of Higher Education for lecturers is crucial. Implementing the SISTER application can provide tangible benefits in terms of efficiency and transparency in lecturer performance reporting, particularly at IAI Al-Hidayah Bogor.

3. Information System Evaluation

A management information system is a management information system that describes the availability of a fairly complete set of data that is stored in order to provide information to support operations, management, and decision-making in an organization (Setiawan, 2022).

According to Stoner, a management information system is a formal method for providing accurate and timely information to management that is needed to facilitate the decision-making process, and enable management functions such as planning, controlling, and organizational operations to be carried out effectively.

Evaluation is a process to provide information about the extent to which a certain activity has been achieved, how the achievement differs from a certain standard to find out whether there is a difference between the two, and how the benefits that have been achieved compare with the expectations that were to be obtained.

Management Information Systems Evaluation is the process of assessing the extent to which an Information System (IS) meets the goals, needs, and expectations of an organization or its users. This evaluation covers the technical, functional, and strategic aspects of the information system being used, developed, or planned.

D. RESULTS AND DISCUSSION

The implementation of the SISTER application has provided tangible benefits in terms of efficiency and transparency in lecturer performance reporting. This finding aligns with SISTER's primary goal, as stated by the Ministry of Education, Culture, Research, and Technology, to integrate lecturer data nationally into a single, unified digital platform.

However, the effectiveness of this application is not yet fully optimal. From the perspective of the Technology Acceptance Model (TAM), user acceptance of a system is determined by *perceived usefulness* and *perceived ease of use*. Findings indicate that although lecturers acknowledge the benefits of SISTER, ease of use remains an issue, especially among senior lecturers who are less familiar with digital systems.

Furthermore, from a policy implementation theory perspective, the success of technology system implementation in public organizations is heavily influenced by resource readiness, training, and institutional support. The study's findings indicate

that differences in infrastructure readiness and internal support across institutions impact the diversity of SISTER user experiences.

On the other hand, this system is also not yet fully adaptive to complex and diverse academic needs. Therefore, future development of SISTER needs to accommodate the flexibility of multidisciplinary and innovative academic input without compromising data validity.

Based on a survey conducted on July 9, 2025 via *Google Form* to 33 lecturers at IAI Al-Hidayah Bogor, researchers obtained the following results regarding the evaluation of the implementation of the SISTER application in supporting the academic performance of lecturers at IAI Al-Hidayah Bogor:

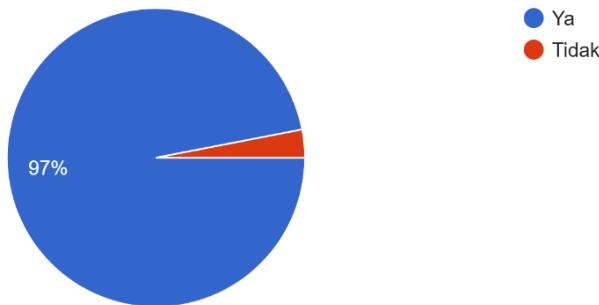


Figure 01

Based on the image above, it states that out of 33 lecturers, 32 lecturers (97%) stated that it was easy to run the menu and features in the SISTER application, while only one lecturer (3%) stated that it was difficult to run it. This can be concluded that most of the lecturers at IAI Al-Hidayah Bogor are able to understand the menu and features in the SISTER application, but some lecturers also do not understand it, so in this case, there needs to be special assistance to these lecturers so that the process can run more smoothly .

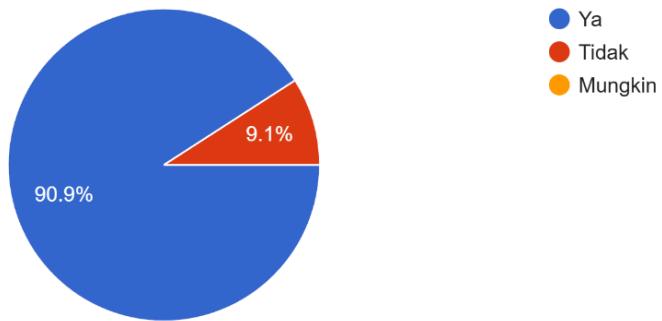


Figure 02

Furthermore, based on the image above, it states that out of 33 lecturers, 90.9% or 30 lecturers stated that they were able to make Lecturer Data Changes (PDD) such as: personal data, educational history, etc. on the SISTER application independently, while 9.1% or 3 lecturers stated that they were not yet able to make Lecturer Data Changes (PDD) on the SISTER application independently. This can be concluded that most of the lecturers at IAI Al-Hidayah Bogor are able to make Lecturer Data Changes (PDD) on the SISTER application independently, but some lecturers are also not yet

able to so that in this case there needs to be special assistance to these lecturers so that the process can run more smoothly .

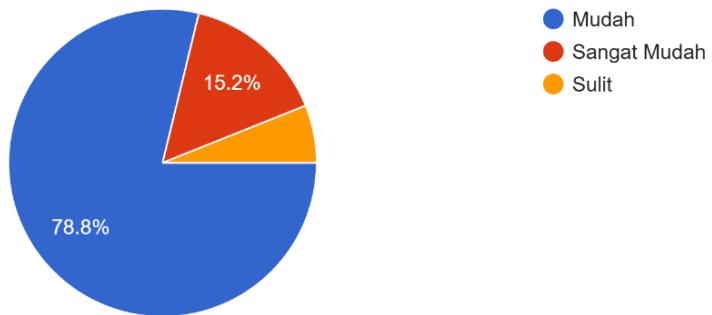


Figure 03

Furthermore, based on the image above, it states that out of 33 lecturers, 78.8% or 26 lecturers stated that it was easy to upload supporting documents (e.g. certificates, decrees, publications) into the SISTER system, while 15.2% or 5 lecturers stated that it was very easy to upload supporting documents into the SISTER system, and 6.1% or 2 lecturers stated that it was difficult to upload supporting documents into the SISTER system. This can be concluded that most lecturers at IAI Al-Hidayah Bogor stated that it was easy to upload supporting documents into the SISTER system, but some lecturers also found it difficult to do so, so in this case, special assistance is needed for these lecturers so that the process can run more smoothly.

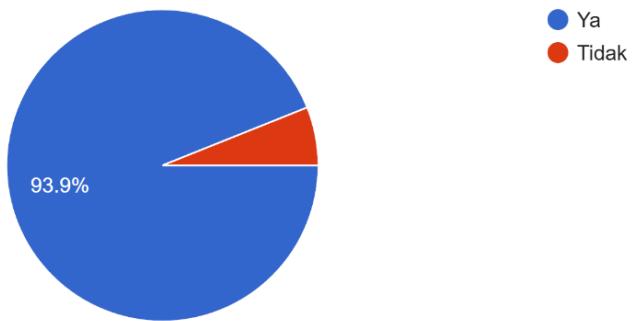


Figure 05

Regarding improving academic administrative efficiency through the SISTER application, according to lecturers at IAI Al-Hidayah Bogor, approximately 93.9% said that using the SISTER application has improved their academic administrative efficiency. However, approximately 6.1% did not feel that the application was helpful. Therefore, special assistance is needed for these lecturers to ensure a smoother process .

Based on the results of a survey on the use of the SISTER application at IAI Al-Hidayah Bogor, it can be concluded that the majority of lecturers have been able to operate this application well. As many as 97% of lecturers stated that it was easy to run the SISTER application menu and features, 90.9% were able to make Lecturer Data Changes (PDD) independently, and 94% (a combination of 78.8% easy and 15.2% very easy) felt no difficulty in uploading supporting documents into the system. In addition, 93.9% of lecturers also considered that the use of the SISTER application could improve the efficiency of their academic administration.

However, a small number of lecturers (between 3% and 9.1%) still experience difficulties accessing or utilizing certain features within the SISTER application. Therefore, special assistance and further training are needed for these lecturers so that all users can optimally utilize the SISTER application to support academic administration activities.

E. CONCLUSION

Based on the research findings, it can be concluded that the majority of lecturers at IAI Al-Hidayah Bogor have a fairly good understanding of how to use the SISTER application. Lecturers generally find it easy to access and use the application's main features, including updating personal data and educational history, and uploading supporting documents such as certificates, decrees, and publications.

Despite this, some lecturers still experience difficulties, either due to limited understanding of the application's workflow, lack of experience with digital systems, or other technical challenges. Furthermore, a small number of lecturers have not yet directly experienced the benefits of this application in improving the efficiency of their academic administration.

This condition shows that although the SISTER application has been generally well received and used, ongoing support is still needed, both through technical training and personal consultation, to ensure that all lecturers can optimize the use of this application in their daily academic activities.

BIBLIOGRAPHY

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*.

Dikti, KSDI and. (2017). SISTER (Integrated Resource Information System) Application Installer.

Hidayat, R. (2019). Implementation of Information Technology in Higher Education: Challenges and Solutions. *Journal of Educational Technology*.

https://duniadosen.com/sister-cloud/#What_Is_SISTER_Cloud_Version.

Iskandar, M. (2019). The Role of Training in Optimizing the Use of Academic Information Systems. *Journal of Education and Technology*.

Ismail, N. (2018). Challenges in Developing Islamic Education Evaluation Instruments. *Journal of Education and Evaluation*.

Kemenristekdikti, DSI and D. (2017a). Guide to Using the Integrated Resource Information System (SISTER) for Personnel Bureaus/Sections. Kemenristekdikti, DSI and D. (2017b).

Ministry of Education and Culture. (2020). SISTER Application User Guide. Jakarta: Directorate General of Higher Education.

Kurnia, L., & Sari, R. (2023). The Effectiveness of Technical Training in Managing Lecturer Performance Load (BKD). *Journal of Educational Administration*.

Nugroho, A. (2021). Continuous Training to Improve Information Technology Skills in Higher Education. *Journal of Educational Research*.

Pandhu, S., & Fitriani, D. (2022). Application of Information Technology in Educational Administration: A Case Study of the SISTER Application. *Journal of Technology and Management*.

Guide to Using the Integrated Resource Information System (Sister) for Lecturers.

Prasetyo, A., & Wijaya, S. (2020). Problem-Based Approach in Information Technology Training for Lecturers. *Journal of Education and Development*.

Rahmatullah, I. (2018). Character-Based Approach in Islamic Religious Education Learning Evaluation. *Journal of Religious Education Studies*.

Rahmawati, N., & Santoso, H. (2022). Technical Support and User Skills in the Implementation of Educational Information Systems. *Journal of Educational Technology Innovation*.

Sari, D., & Hidayati, N. (2021). Technical Guidance to Improve the Accuracy of BKD Completion with the SISTER Application. *Journal of Educational Management*.

Setiawan, J., & Kurniawati, E. (2023). The Effect of Technical Training on BKD Reporting Compliance in Higher Education. *Journal of Educational Management*.

Sugiyono. (2020). Quantitative, Qualitative, and R&D Research Methods (Bandung). Alfabeta, Cv.

Sugiyono. (2016). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta.

Suparman, B. (2020). Bkd Management System in Improving Lecturer Performance. *Journal of Educational Sciences*.

Suryani, D. (2021). The Role of Technology in Developing Islamic Religious Education Learning Evaluation. *Journal of Educational Technology*.

Widodo, H. (2022). Evaluation of the Use of the SISTER Application in Lecturer Performance Assessment. *Journal of Educational Technology*.

Widodo, S., & Lestari, M. (2023). Technical Support and Technology Adaptation in Academic Environments. *Journal of Technology and Education*.

Wulandari, R., & Rahmawati, I. (2021). Implementation of the SISTER Application in BKD Reporting: Evaluation and Recommendations. *Journal of Educational Administration and Policy*.

Akbar, A., & Noviani, DN (2019). Challenges And Solutions In The Development Of Educational Technology In Indonesia. *Proceedings Of The National Seminar On Postgraduate Program, University Of Pgri Palembang*. <https://jurnal.univpgri-palembang.ac.id/index.php/Prosidingpps/article/view/2927>

kemdiktisaintek.go.id. (nd). *Reducing Lecturers' Administrative Burden, the Directorate General of Higher Education, Science, and Technology Releases Cloud-Based SISTER – Ministry of Higher Education, Science, and Technology of the Republic of Indonesia*. Retrieved July 16, 2025, from <https://kemdiktisaintek.go.id/kabar-dikti/kabar/kurangi-beban-administrasi-dosen-ditjen-diktiristek-rilis-sister-berbasis-cloud/>

Razak, Y., Syah, D., & Hsb, AA (2016). Leadership, Lecturer Performance In Improving The Quality Of Higher Education. *Tanzhim*, 1 (02), 30-44.

<https://ftk.uinbanten.ac.id/journals/index.php/tanzhim/article/view/41>

Setiawan, J. (2022). Management Information Systems: The Purpose of Management Information Systems. In *CV. Pena Persada* (2011th ed., April Issue). Mitra Wacana Media. <http://max21487.blogspot.com/2012/04/tujuan-sistem-informasi-manajemen.html>

SEVIMA. (nd). Retrieved July 15, 2025, from <https://sevima.com/apa-function-dan-benefit-sister-bagi-dosen/>