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Information-System-Based Internal Quality Assurance in PTKI: A Content Analysis of SPMI Regulations, SN-Dikti, and BAN-PT Accreditation Standards

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Abstract

*Internal quality assurance in Islamic Religious Higher Education Institutions (*Perguruan Tinggi Keagamaan Islam *or PTKI) plays an important role in maintaining and continuously improving the quality of higher education. Its implementation requires the support of an information system capable of facilitating data management, evaluation, standard monitoring, and systematic quality reporting. However, internal quality assurance still faces several challenges, including suboptimal data integration, limited utilization of information technology, inconsistent implementation of standards, and the need to align internal quality assurance systems with accreditation requirements. This article aims to analyze the relationship between the Internal Quality Assurance System (Sistem Penjaminan Mutu Internal or SPMI), the National Standards for Higher Education (Standar Nasional Pendidikan Tinggi or SN-Dikti), and the accreditation standards of the National Accreditation Board for Higher Education (Badan Akreditasi Nasional Perguruan Tinggi or BAN-PT) in supporting information system-based internal quality assurance in PTKI. This study employs a qualitative method using a content analysis approach to examine relevant regulatory documents and standards. The data are analyzed by identifying provisions related to the quality assurance cycle, information management, continuous evaluation, documentation, and accreditation standard compliance. The analysis focuses on identifying the relationships among these three frameworks and examining the role of information systems in supporting data integration, reporting accuracy, transparency, and evidence-based decision-making. This study emphasizes that information systems function not merely as data storage tools but also as essential supports for planned, measurable, and sustainable quality assurance processes. The success of their implementation depends on regulatory alignment, human resource readiness, data governance, and the commitment of institutional leadership. Therefore, information system-based internal quality assurance in PTKI needs to be developed through the integration of regulations, quality assurance processes, and technology to support the continuous improvement of higher education quality.*

Keywords: *Internal Quality Assurance, Information Systems, Islamic Higher Education.*

INTRODUCTION

Islamic Religious Higher Education Institutions (PTKI) face demands to maintain and improve educational quality through the implementation of higher education standards, continuous evaluation, and the fulfillment of accreditation criteria. These demands relate to many aspects of running a university, from the learning process, lecturer competence, student management, research, and community service to institutional governance. In practice, universities need information that is accurate, documented, and easy to trace so that every quality improvement decision is based on accountable evidence.

Developments in information technology open opportunities for PTKI to strengthen the implementation of quality assurance through more integrated data management. Academic data,

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performance reports, learning evaluation results, standard documents, and evidence of activity implementation can be managed systematically to support monitoring and evaluation. However, the use of an information system does not by itself guarantee quality improvement. Problems can arise when available data are not updated regularly, documents across units are not integrated, performance indicators are not understood uniformly, or evaluation results are not followed up with measurable improvements. Therefore, the use of information systems needs to be linked to the quality assurance process and prevailing policies, not merely to the availability of applications.

In implementing quality assurance in higher education in Indonesia, several regulatory frameworks need attention, namely the Internal Quality Assurance System (*Sistem Penjaminan Mutu Internal*, SPMI), the National Standards for Higher Education (*Standar Nasional Pendidikan Tinggi*, SN-Dikti), and the accreditation standards used by the National Accreditation Board for Higher Education (*Badan Akreditasi Nasional Perguruan Tinggi*, BAN-PT). The three are interrelated in encouraging universities to meet standards and improve quality continuously. SPMI is part of the mechanism for controlling and developing quality at the university level, SN-Dikti serves as the national standard reference, and accreditation instruments are used to assess the fulfillment of quality criteria under prevailing provisions. For PTKI, understanding how these three frameworks relate is necessary so that the management of quality data and documents does not run separately from academic and administrative activities.

The issue to consider is not only the availability of information systems but also their fit with quality assurance needs. Data stored in various applications cannot necessarily be used directly as evidence of meeting standards if the indicators used differ, supporting documents are incomplete, or evaluation results are not linked to improvement plans. In addition, managing quality information requires a clear division of responsibility among university leaders, the quality assurance body, study programs, and related work units. Without such coordination, an information system risks becoming merely a means of collecting documents for reporting and accreditation, rather than a tool that supports continuous quality improvement.

Based on these issues, this article aims to analyze the content of the SPMI, SN-Dikti, and BAN-PT accreditation standard regulations, emphasizing the links among provisions, data needs, documentation, evaluation, and the use of information systems in PTKI internal quality assurance. The analysis is directed at identifying the fit between internal quality assurance provisions and the evidence required in accreditation, while also examining opportunities for information integration to support data-based decision-making. The contribution of this article lies in an integrated reading of these regulations and standards, so that information systems can be positioned as part of quality governance rather than merely an administrative tool. Thus, this study is expected to provide an analytical basis for PTKI in aligning quality policy, information management, and continuous evaluation with prevailing regulations.

METHODS

This article uses a qualitative approach with the *content analysis* method to examine regulations on information-system-based internal quality assurance in Islamic Religious Higher Education Institutions (PTKI). The study focuses on the links among the Internal Quality Assurance System (SPMI), the National Standards for Higher Education (SN-Dikti), and the accreditation standards of the National Accreditation Board for Higher Education (BAN-PT). The units of analysis are official regulatory documents, policies, and standards related to the implementation of higher education quality assurance, information management, quality evaluation, documentation, and the fulfillment of accreditation criteria. This approach was chosen because it allows researchers to systematically identify the content of provisions and the similarities, differences, and links among documents.

Data were collected by searching documents from official government sources and related institutions, mainly the Legal Documentation and Information Network (*Jaringan Dokumentasi dan Informasi Hukum*, JDIH), the website of the Ministry of Higher Education, Science, and Technology, and the official BAN-PT website. The documents searched included regulations on higher education quality assurance, SN-Dikti provisions, SPMI policies, and relevant accreditation standards. The search used keywords such as “Sistem Penjaminan Mutu Internal”,

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"Standar Nasional Pendidikan Tinggi", "standar akreditasi BAN-PT", "sistem informasi penjaminan mutu", and "penjaminan mutu internal perguruan tinggi keagamaan Islam". The documents obtained were examined by identity, year of issue, validity status, scope of regulation, and relevance to the research focus.

The inclusion criteria in this study were official documents that regulate or relate directly to SPMI, SN-Dikti, BAN-PT accreditation standards, and the use of information systems in managing higher education quality. Documents had to come from verifiable sources and contain provisions relevant to the research objectives. Meanwhile, the exclusion criteria covered documents whose authenticity could not be confirmed, provisions no longer in force when not needed for historical analysis, duplicate documents, and sources that discussed information technology in general without a clear link to higher education quality assurance. The data recorded included the document name, regulation number and year, issuing institution, main provisions, quality assurance aspects, data and documentation needs, and links to information systems and accreditation.

Data analysis was carried out in several stages: document identification, thorough reading, content coding, theme grouping, and interpretation of results. The analytical categories included the internal quality assurance cycle, fulfillment of higher education standards, data management and integration, documentation of quality evidence, evaluation and follow-up, and the link between SPMI implementation and BAN-PT accreditation assessment. The coding results were then compared across documents to identify fit, differences, and parts requiring attention in implementing information systems. The analysis also considered the standing of each regulation so that differences in regulatory scope were not immediately interpreted as conflicts between regulations.

It should be emphasized that the study's conclusions must be based on official documents that were actually collected and examined. Therefore, the validity status of regulations, the fit of provisions, and the relationship among SPMI, SN-Dikti, and BAN-PT accreditation standards need to be verified before the analysis results are finalized. This study does not use unverified figures for the number of documents or coding results. To improve the traceability and reliability of the research, the search process needs to be accompanied by a list of the documents analyzed, a data extraction table, coding categories, and notes on the basis for interpreting each provision. With these steps, content analysis is expected to produce a systematic picture of the role of information systems in supporting PTKI internal quality assurance.

DISCUSSION

1. The Position of SPMI, SN-Dikti, and BAN-PT Accreditation Standards in PTKI Quality Assurance

Internal quality assurance in Islamic Religious Higher Education Institutions (PTKI) needs to be carried out based on prevailing regulations and adapted to institutional development needs. Its implementation is not enough with drafting standard documents; it also requires monitoring, evaluation, control, and follow-up processes that can be proven through data. In this context, the Internal Quality Assurance System (SPMI), the National Standards for Higher Education (SN-Dikti), and the accreditation standards of the National Accreditation Board for Higher Education (BAN-PT) have interrelated but not entirely identical positions (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023; BAN-PT, 2025).

SPMI is an internal mechanism for universities to set, implement, evaluate, control, and improve quality standards continuously. Its implementation enables universities to identify gaps between the standards that have been set and actual conditions in the field. Meanwhile, SN-Dikti provides the national standard reference that must be observed in running higher education. BAN-PT accreditation standards serve as the basis for quality assessment according to the scope and accreditation instruments in force (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023; BAN-PT, 2025).

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For PTKI, the link among these three frameworks is important because the provision of religious higher education must meet national standards while also developing its academic and institutional characteristics. Data on the learning process, research, community service, human resources, governance, and performance achievements need to be managed so that they can be used in implementing SPMI and in preparing accreditation evidence. Thus, information systems can serve as a bridge between academic activity, internal evaluation, and quality documentation needs (BAN-PT, 2025).

This relationship can be divided into several parts, namely:

a. SN-Dikti: Reference for national higher education standards.
b. PTKI SPMI: Setting, implementation, evaluation, control, and improvement of quality.
c. Quality Information System: Management of data, documentation, indicators, and follow-up.
d. BAN-PT Accreditation Standards: Assessment of criteria fulfillment based on the instruments in force.

This scheme shows that information systems do not replace the function of regulations, SPMI implementation, or accreditation assessment. Information systems serve to support the connection of data and evidence needed in each process. Therefore, the quality of quality assurance is determined not only by the presence of applications but also by the fit of standards, accuracy of data, involvement of work units, and consistency of follow-up (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).

2. Content Analysis of SPMI and SN-Dikti Regulations

The analysis of SPMI and SN-Dikti regulations needs to consider the relationship among the standards set, their implementation processes, and the evidence used to assess quality achievement. Internal quality assurance does not stop at drafting policy and standard documents but must be applied in real activities within the university. Each standard needs clear indicators, a responsible party, data sources, an evaluation mechanism, and follow-up in line with evaluation results (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).

In practice, the internal quality assurance cycle can be used to ensure that every university activity runs according to the standards set. At the setting stage, the university formulates the standards and indicators to be achieved. At the implementation stage, study programs and work units carry out activities based on those standards. Subsequently, evaluation is conducted to determine the level of achievement, while control is used to address deviations or nonconformities. The improvement stage is directed at refining standards and work processes based on earlier evaluation results (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).

Information systems can support each of these stages by providing structured data. For example, lecturer attendance data, course delivery, learning evaluation results, and research achievements can be used for monitoring academic performance. However, such data must have clear sources, be updated regularly, and be checked for accuracy before being used for decisions. Inaccurate data can cause evaluation results not to reflect actual conditions and potentially yield less appropriate improvement recommendations (BAN-PT, 2025). The link between SPMI and SN-Dikti also demands alignment between a university's internal standards and the national standards in force. PTKI need to map each internal standard to the relevant national provisions to avoid inconsistencies in quality implementation. Such mapping can be done through a matrix that records the regulatory basis, internal standard, achievement indicator, implementation evidence, evaluation results, and follow-up plan (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).

Thus, the content analysis of regulations needs to be directed at seeing whether the provisions in force have been translated into working mechanisms that can be run and

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monitored. Information systems will provide greater benefit when used to support the entire quality assurance cycle, not only to store documents or meet reporting needs.

3. The Link Between Information Systems and BAN-PT Accreditation Standards

Accreditation is one mechanism of external quality assessment that requires information on the provision of higher education and evidence of meeting the set criteria. For PTKI, accreditation preparation relates to the institution's ability to collect, process, verify, and present relevant data. Therefore, information systems have the potential to help universities link internal quality assurance activities with external evaluation needs (BAN-PT, 2025).

Problems can arise when data for accreditation are collected separately from SPMI activities. For example, study programs keep academic performance data in one file, the research unit manages publication data in another, while the quality assurance body stores evaluation results in a different system. Such conditions can lead to duplicated work, differing figures across units, and difficulty tracing supporting evidence. This situation is a governance risk that needs to be examined in research, not a condition that can be assumed to occur in all PTKI.

Integrating information systems can help reduce these problems through consistent indicator definitions, a division of data management responsibilities, and structured evidence storage. For example, data on lecturers' research can be managed by the responsible unit, verified according to internal procedures, and then used for quality evaluation and preparing accreditation documents. With this mechanism, data do not need to be collected anew each time the university conducts an evaluation or prepares for accreditation (BAN-PT, 2025).

Nevertheless, data conformity does not automatically mean that all accreditation criteria have been met. Accreditation also relates to process quality, results achieved, program relevance, governance, and evidence that the university makes continuous improvements. Information systems only help provide and trace evidence, whereas assessment of the substance of quality must still refer to the official accreditation instruments in force (BAN-PT, 2025). Therefore, content analysis of BAN-PT accreditation standards needs to identify the information required for each criterion, the link between that information and internal standards, and how universities prove follow-up on evaluation results. The results of this mapping can become the basis for designing a more focused quality information system, without equating the function of internal quality assurance with the external accreditation process.

4. Challenges in Implementing Information Systems in PTKI Internal Quality Assurance

Implementing information systems in PTKI internal quality assurance faces several aspects that need attention, especially data integration, human resource competence, information governance, and the sustainability of evaluation. These four aspects are interrelated because an available system will not function optimally if data are not well managed or evaluation results are not used to improve higher education provision. Some of the implementation challenges are:

a. Data integration and accuracy: Quality data come from various units, such as study programs, academic affairs, finance, personnel, research, and community service. Differences in recording formats and indicators can complicate the merging of information. To address this, universities need to develop data standards, designate primary data sources, and set procedures for verifying and updating information. This step is important so that data used in internal evaluation and accreditation are consistent and traceable to their sources (BAN-PT, 2025).
b. Human resource competence: Managing information systems requires technical ability as well as an understanding of the substance of quality assurance. An operator who can use applications does not necessarily understand the relationship among indicators, standards,

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and evidence of achievement. Conversely, quality managers who understand regulations also need skills in reading and using data. Therefore, competence development should include training in data management, understanding regulations, indicator analysis, and preparing evidence-based improvement recommendations.

c. Information governance and security: University data may include personal information of students, lecturers, and education staff, as well as institutional documents. Its management needs to consider access rights restrictions, personal data protection, information backups, and control of data changes. Universities also need to designate who is responsible for the accuracy and security of information. Without clear governance, system integration can actually increase the risk of data misuse or errors in the use of information.
d. Consistency of follow-up on evaluation results: Information systems will provide limited benefits if used only to collect reports and meet accreditation needs. Evaluation results should be the basis for determining improvement priorities, assigning responsible persons, drafting implementation schedules, and monitoring the achievement of follow-up. In this way, universities can assess whether the resulting recommendations are actually implemented and bring about changes in the quality of higher education provision (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).

In conclusion, these four aspects show that developing a quality information system is not enough through procuring software. PTKI also need to build clear work procedures, improve the competence of managers, maintain data quality, and ensure the involvement of leaders and work units. The success of implementing information systems should ultimately be judged by their contribution to the effectiveness of quality assurance implementation, not merely by the number of applications used.

5. An Integration Model for Information-System-Based PTKI Internal Quality Assurance

Based on the relationships among SPMI, SN-Dikti, and BAN-PT accreditation standards, information system integration can be developed through a quality management model that links regulations, internal standards, performance data, evaluation, and follow-up. This model is a conceptual synthesis that can be used as an analytical framework, not the result of empirical testing at a particular PTKI (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023; BAN-PT, 2025).

a. Regulation Mapping
   SPMI, SN-Dikti, and the accreditation standards in force are mapped to identify the provisions that universities must fulfill. The mapping results are used as the basis for drafting internal standards and determining quality indicators. This process needs to consider regulatory changes so that the standards used remain relevant to the latest provisions (Kementerian Pendidikan Tinggi, Sains, dan Teknologi, 2025; BAN-PT, 2025).
b. Setting Quality Standards and Indicators
   Universities set internal standards that fit national provisions and institutional development needs. Each standard is equipped with measurable indicators, achievement targets, a responsible person, and a data source. This setting aims to ensure that quality implementation can be evaluated against clear criteria.
c. Data Integration and Management
   Data from study programs and work units are collected through uniform procedures. The data are then checked, updated, and stored in a structured way so that they can be used for quality monitoring and for preparing accreditation evidence. Data management needs to be accompanied by a clear division of access rights and responsibilities.

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d. Quality Evaluation and Control
   The collected data are used to compare actual achievements with the standards and indicators set. If nonconformities are found, universities need to analyze their causes and determine appropriate control measures. Evaluation results must be supported by evidence that can be examined and traced.
e. Follow-up and Quality Improvement
   Evaluation results are used to draft improvement plans with clear targets, schedules, and responsible persons. Follow-up implementation is then monitored to determine its level of success. The results become input for refining standards and planning quality in the next period (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023).
   This model positions information systems as a supporting means that connects standards, implementation, evaluation, and quality improvement. Its application needs to be adapted to the condition of each PTKI, including the readiness of human resources, technology infrastructure, and data management needs. Thus, information system integration is expected to strengthen the consistency of SPMI implementation while helping universities prepare evidence relevant to the accreditation process.

CONCLUSION

Information-system-based internal quality assurance plays an important role in improving the quality of education in Islamic Religious Higher Education Institutions (PTKI). The link among SPMI, SN-Dikti, and BAN-PT accreditation standards needs to be realized through integrated data management, periodic evaluation, and documentation in accordance with prevailing provisions. Information systems can help universities monitor the achievement of standards and provide evidence to support the accreditation process.

The success of implementing information systems depends on data accuracy, human resource competence, good governance, and leaders' commitment to carrying out quality improvement. Therefore, PTKI need to align information systems with the latest regulations and ensure that evaluation results are followed up in a planned manner. Thus, information systems become not only an administrative means but also support the continuous improvement of higher education quality.

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