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INTEGRATING INTERNAL QUALITY MANAGEMENT AND INSTITUTIONAL PERFORMANCE: EVIDENCE FROM A CONTINUOUS IMPROVEMENT FRAMEWORK

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ABSTRACT

Improving the quality of higher education governance requires universities to ensure the implementation of the Internal Quality Assurance System (SPMI) is effective and aligned with the achievement of Key Performance Indicators (KPI). This study aims to analyze the implementation of the Determination-Implementation-Evaluation-Control-Improvement cycle in SPMI and examine its relationship to KPI performance at Jakarta State University. A qualitative approach with a case study design was used through in-depth interviews, quality document analysis, observation of SPMI Online and KPI Dashboard, and focus group discussions, then analyzed using thematic analysis techniques. The results show that the quality cycle has been implemented in all units, but there are variations in the consistency of evaluation, follow-up, and documentation, while the use of digital systems has been proven to strengthen the traceability of quality evidence and the relevance of SPMI to KPI achievement. This study contributes by providing an empirical understanding of the relationship between internal quality management and institutional performance, and offers a digital-based quality strengthening framework for universities in the era of educational transformation.
Keywords: Higher Education, Internal Quality Assurance, Key Performance Indicators, Quality Cycle

INTRODUCTION

To ensure that higher education institutions are able to produce quality graduates who meet the needs of the workforce, a system is needed to ensure the quality of education on an ongoing basis. One system that plays a role in ensuring educational quality is the Internal Quality Assurance System (SPMI) (Daromes & Ng, 2015; Tarigan & Zahara, 2024). SPMI is a mechanism implemented by higher education institutions to monitor, evaluate, and improve educational standards through a cycle-based approach called PPEPP (Determination, Implementation, Evaluation, Control, and Improvement) (Suryadi &

Erlangga, 2021). With this system, educational institutions can identify strengths and weaknesses in the learning process and develop more effective quality improvement strategies. The implementation of SPMI in higher education institutions not only focuses on improving the quality of learning but also contributes to improving the quality of the Tri Dharma of Higher Education, namely teaching, research, and community service (Krooi et al., 2024). In the context of Jakarta State University (UNJ), the implementation of the Quality Assurance System (SPMI) is expected to encourage the achievement of Key Performance Indicators (KPI), which reflect the quality of education, the relevance of graduates to the workforce, and lecturer productivity in research and community service (Khuram et al., 2023; Mok & Sawn Khai, 2024).

Regulations related to the quality assurance system in higher education are stipulated in Ministerial Regulation Number 53 of 2023 concerning the Higher Education Quality Assurance System (SPM Dikti). This regulation emphasizes that the higher education quality assurance system aims to ensure compliance with higher education standards systematically and sustainably, thereby fostering a culture of quality within the higher education environment (Makhmudah et al., 2024). This Regulation regulates three main components of the higher education quality assurance system: (a) the Internal Quality Assurance System (SPMI), which encompasses planning, implementation, evaluation, control, and continuous quality improvement; (b) External Quality Assurance System (SPME) which is carried out through accreditation by the National Accreditation Board for Higher Education (BAN-PT) and international accreditation institutions; and (c) Higher Education Database (PD Dikti) as a data reporting system that supports the implementation and evaluation of quality assurance.

Minister of Education, Culture, Research, and Technology Regulation Number 53 of 2023 emphasizes that effective implementation of SPMI can increase the competitiveness of higher education institutions at the national and international levels. It is important for UNJ to ensure that the SPMI implemented complies with this regulation, in order to achieve higher standards in higher education. By implementing SPMI, universities can ensure that every element of education, from curriculum, lecturers, to facilities, meets the established standards (Aburizaizah, 2022; Beny et al., 2022). This has a direct impact on: (a) improving the quality of learning received by students and producing competent graduates who will easily find jobs with adequate income; (b) improving student achievement; (c) encouraging lecturers to continue developing their competencies and improving the quality of the lecturer's tri dharma both in terms of research and publications

as well as lecturer service outside the campus; (d) improving the reputation of the university; and (e) facilitating higher education institutions and study programs in preparing for the accreditation process by the National Accreditation Board for Higher Education (BAN-PT), the Independent Accreditation Institution (LAM), and internationally (Bogren et al., 2024; Hou et al., 2023; Stura et al., 2019).

However, to date, various challenges remain in the implementation of SPMI that need to be identified and analyzed. One major obstacle is how this system can be effective in improving UNJ's KPI achievement, as well as how SPMI implementation relates to overall institutional performance. Furthermore, SPMI implementation often faces obstacles in the form of a lack of awareness and participation from various stakeholders, limited resources, and the complexity of implementing the PPEPP cycle (Overberg et al., 2019; Salto, 2015). Several previous studies have discussed SPMI implementation in higher education, such as the study by Sofyani et al. (2023), which discusses SPMI implementation in achieving quality standards and improving the quality of higher education. Furthermore, research by Mireku and Bervell (2024) identified various obstacles in the implementation of SPMI, highlighting factors that hinder the success of this system. Research by Iqbal et al. (2024) also attempted to examine the impact of SPMI on accreditation, investigating how SPMI implementation can support national and international accreditation processes. However, no research has been found that specifically analyzes the relationship between SPMI implementation and the achievement of Key Performance Indicators (KPI) in higher education. Therefore, this study has the novelty of linking the effectiveness of SPMI with institutional performance based on KPI, which can serve as a reference for other higher education institutions in improving the quality of education.

RESEARCH METHOD

This research uses a qualitative approach with an institutional case study design to deeply understand how the Internal Quality Assurance System (IQAS) is implemented in various units at Jakarta State University (UNJ) and how this implementation relates to the achievement of Key Performance Indicators (KPIs). According to Creswell and Poth (2018) case studies are regarded as a way for thoroughly analyzing a contemporary phenomenon in the context of real life. The qualitative approach was chosen because the research objective is not only to measure achievement but also to explore the processes, dynamics, perceptions, and practices of quality assurance that occur at the institutional, faculty, and study program levels. Data collection was conducted through four main

techniques: in-depth interviews, document analysis, digital system observation, and focus group discussions (FGDs). Informants were selected purposively based on their direct involvement in the quality assurance cycle, ensuring the information obtained is relevant, rich, and reflects the reality of IQAS implementation. All data were analyzed using thematic analysis techniques, which include data familiarization, coding, theme development, theme review, and final interpretation (Ozuem et al., 2022). Themes were analyzed deductively based on the IQAS and KPI frameworks, and inductively based on field findings. Data validity is maintained through triangulation of techniques and sources, member checking, and intensive researcher involvement in the data collection process.

FINDINGS AND DISCUSSION

1. Fulfillment of the PPEPP (Planning–Implementation–Evaluation–Control–Improvement Cycle) Cycle in Quality Assurance

The implementation of the Determination, Implementation, Evaluation, Control, and Improvement (PPEPP) cycle at Jakarta State University (UNJ) has shown encouraging progress, particularly after the university implemented two digital instruments. This digital system provides a strong foundation for internal quality assurance processes, although the level of utilization varies across units. Research indicates that all units have formally implemented the PPEPP cycle, but implementation is not always consistent or integrated between manual processes and the university-provided digital system. This variation shapes the quality of PPEPP compliance across units (Beny et al., 2022; Liu, 2020). The Standards Determination phase at UNJ has a sound institutional foundation. University-level quality standards documents have been uploaded and are available in SPMI Online, allowing each faculty, department, and study program to access the SPMI Manual, SPMI Standards, and supporting forms.

The Standards Implementation phase also shows significant variation. Study programs with a strong quality culture consistently implement learning, research, and service standards and document evidence of this implementation in SPMI Online. Evidence such as lesson plans (RPS), lecture monitoring reports, MBKM curriculum documents, student activity reports, and even lecturer research evidence can be uploaded and monitored in a structured manner within the system (Nugraha et al., 2023). However, in other units, standard implementation has not been fully integrated with digital documentation. Although actual quality activities are carried out, routine documentation in SPMI Online has not become a habit. This creates a gap between field activities and digital evidence that

should strengthen quality consistency (Asiyai, 2022). The evaluation phase of the PPEPP cycle is dominated by the role of the Internal Quality Audit (AMI). Research results show that AMI at UNJ has become stronger after being supported by a digital system, because auditors can view evidence of standard implementation uploaded by units without relying on physical documents. The digital system makes it easier for auditors to compare standards and implementation, and monitor follow-up to previous year's audits (Adha et al., 2019; Haipinge & Kadhila, 2024). However, the effectiveness of evaluations is highly dependent on the quality of unit uploads. Study programs that actively engage in digitalization facilitate the AMI process and demonstrate more consistent internal evaluations. Conversely, units unfamiliar with systematically uploading evidence often experience difficulties leading up to the AMI due to the need to gather documents on short notice. Evaluations in this context become administrative rather than reflective, thus not fully reflecting the effectiveness of the PPEPP cycle.

The role of the KPI Dashboard has also become an increasingly relevant evaluation instrument in the context of SPMI. Units using the KPI Dashboard can view their performance achievements based on national indicators, such as graduate employment, lecturers engaging in off-campus activities, MBKM students, collaborations, and publications. The KPI Dashboard has the potential to become a performance evaluation tool aligned with SPMI, as some of UNJ's quality standards are directly related to KPI achievement. However, not all units utilize this dashboard for routine evaluations. Some study programs do not fully understand how KPI data can be linked to quality standard evaluations. Variations in KPI Dashboard utilization lead to differences in evaluation quality between units: units that actively read KPI data tend to conduct more evidence-based evaluations than units that utilize it less (Iskarim et al., 2024). The Control phase is a crucial point in the PPEPP cycle. Research shows that units with high discipline in digital documentation tend to implement AMI follow-up in a more structured manner. Some faculties strive to ensure that follow-up plans are actually implemented. However, there are also units that only upload TL documents without monitoring implementation in the field. This is where the gap between digital control and actual practice emerges. Meanwhile, the KPI Dashboard serves as a tool for monitoring performance. When a unit observes stagnant KPI performance, it should implement controls by analyzing the causes and making corrections (Mursidi, 2022). However, this utilization has not yet become a universal practice across all UNJ units.

The Improvement stage is the most ideal but the most difficult to achieve. In the context

of quality digitalization, improvement should be achieved through standard updates based on AMI findings and KPI achievements presented on the KPI Dashboard (Iskarim et al., 2024; Welch & Aziz, 2021). Some units have implemented data-driven improvements, for example, updating the curriculum based on tracer study results, improving student services based on user evaluations, or strengthening partnerships based on KPI needs. However, this improvement is still occurring in some units, not all. Many units have not yet used SPMI Online data or the KPI Dashboard as a basis for standard improvement, so that improvements are more incidental or driven by accreditation needs, rather than by the full PPEPP cycle. The implementation of PPEPP at UNJ is in a transition phase toward digitally-enabled quality assurance, where digital systems are in place but not yet fully internalized in daily quality practices across all units (Zhuravel et al., 2021). Units that build a data-driven quality culture demonstrate more consistent and high-quality PPEPP implementation compared to units that still rely on manual processes or have not yet mastered digital systems. The digitalization of quality across various systems opens up significant opportunities for UNJ to strengthen the uniform implementation of PPEPP (Ivanova et al., 2020). However, this requires widespread digital quality literacy, leadership that encourages the use of technology, and a culture of data-driven reflection in each unit. Implementing PPEPP requires not only the system but also the readiness of the people who operate it.

2. The Implementation of the Internal Quality Assurance System and the Achievement of Key Performance Indicators of Higher Education Institutions

Field findings indicate that study programs utilizing SPMI Online consistently have more organized quality documentation, more comprehensive evidence of standard implementation, and a more structured track record of PPEPP implementation. These units typically have a strong understanding of learning standards, research standards, and student service standards. When learning standards are effectively implemented—for example, through an adaptive curriculum, updated RPS, and lecture monitoring—graduates develop relevant competencies, which improves tracer study performance, ultimately strengthening the unit's contribution to the KPI (Javed, 2023). The use of the KPI Dashboard clarifies the link between SPMI and unit performance. Units that regularly monitor the dashboard tend to be more aware of their indicator achievements and take corrective action more quickly. Some study programs use the KPI Dashboard as a component of monthly quality meetings or as a basis for developing achievement

strategies. By viewing real-time data, units can identify stagnant indicators, such as low student enrollment in the MBKM program or minimal lecturer involvement in industry activities. This data-driven approach makes SPMI not only an administrative instrument but also a driving force for strategic improvement (Musa, 2019).

In contrast, units unfamiliar with the KPI Dashboard tend to have a weaker relationship between quality implementation and KPI achievement. They often struggle to understand which indicators need improvement and how quality standards contribute to achieving national targets. This suggests that the link between SPMI and KPI is not automatically established simply because both instruments are available; it must be built through data utilization, digital quality literacy, and a strong evaluation culture. In the context of quality standards, several units that have consistently implemented standards for learning, research, and student services appear to be more capable of achieving relevant KPIs. For example, study programs with experiential learning standards are more likely to send students to MBKM activities. Other study programs that enforce research standards, such as mandatory annual publication reports or research collaborations, tend to have better research performance among lecturers. Clear quality standards provide direction for units to align academic activities with indicators measured at the national level (Tezcan-Unal et al., 2018).

The relationship between SPMI and KPI is ultimately formed through units' habitual use of data from the system. Units that view SPMI as a continuous process, not just an audit requirement, demonstrate better KPI achievement. They understand that quality standards are tools for improvement, and KPIs are performance targets that serve as benchmarks for successful standard implementation. The integration of quality activities documented in SPMI Online and performance achievements visible on the KPI Dashboard creates a clearer and more measurable improvement path (Schellekens et al., 2022). Research findings indicate that the link between SPMI and KPI at UNJ is built through an understanding of standards, consistent implementation, a culture of data-driven reflection, and active use of prepared digital systems. When digital instruments are used harmoniously, units are able to see a direct relationship between the quality of standard implementation and institutional performance outcomes (Sánchez-Chaparro et al., 2022). However, when the utilization of both systems is not optimal, the link weakens and KPI achievement stagnates.

CONCLUSION

This study concludes that the implementation of the Internal Quality Assurance System (SPMI) at Jakarta State University (UNJ) has been operating within a strong institutional framework, but still shows variation between units in fulfilling the Determination-Implementation-Evaluation-Control-Improvement cycle. The use of digital systems is a factor that differentiates the effectiveness of quality implementation across units, particularly in providing evidence of standard implementation, evaluation consistency, and the speed of data-driven decision-making. Theoretically, this study enhances understanding of the relationship between internal quality management and the achievement of institutional performance indicators through a continuous improvement framework. Practically, these findings provide a foundation for higher education institutions to strengthen digital quality literacy, improve documentation and evaluation consistency, and integrate digital instruments more strategically into their quality assurance systems.

This study has several limitations, primarily due to its focus on a single institution, which limits the generalizability of the findings to the UNJ context. Furthermore, the varying levels of digital system utilization between units lead to varying levels of analysis. Therefore, further research is recommended to expand the study context to universities with varying levels of quality digitalization and combine qualitative approaches with data-driven quantitative analysis. Further research is also needed to develop a digital quality cycle effectiveness measurement model and analyze leadership factors, organizational culture, and technological capabilities that influence the success of SPMI implementation in the digital transformation era.

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