



Quality Assurance System (SPMI) Management Based On E-SPMI KPIS at Widya Mandira Catholic University East Nusa Tenggara

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Abstract: In this article, we will review relevant literature related to SPMI management based on e-SPMI KPIs in universities, especially at Widya Mandira Catholic University. The focus of this article's study includes; a). How the implementation of e-SPMI KPIs compares to the concept of quality management in higher education, and b). Impact on institutions implementing quality assurance systems based on e-SPMI KPIs. The method of this research is to use a qualitative and quantitative approach with a case study method. Data collection techniques through direct observation, document and archive searches, and in-depth interviews. The results of this study are The results of this study show that a). The SPMI document is determined at Unwira through the determination of key indicators based on government regulations, regulations of the PT/LAM accreditation body, based on the Vision and Strategic Plan. The Main Indicator as the key to SPMI is made in e-SPMI and developed by the Unwira IT Team. The trial of the use of e-SPMI KPIs was carried out for 3 years with achievements, namely in 2021 with a score of 2.79 out of a maximum score of 4 or 62%, in 2022 with a score of 2.5 out of a maximum score of 4 or 69.75%, and in 2023 with a score of 3.07 out of a maximum score of 4 or 76.75%. The e-SPMI KPIs model has advantages and disadvantages, so it needs continuous improvement to become a superior accredited university

Keywords: e-SPMI KPIs Model, SPMI Management, Higher Education Quality

Introduction

Permendikbudristek Number 53 of 2023 concerning Higher Education Quality Assurance is a regulation issued by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. This regulation aims to improve the quality of higher education in a planned and sustainable manner through the establishment, implementation, evaluation, control, and improvement of Higher Education Standards. All public or private higher education institutions are required to formulate a quality assurance system in accordance with national standards or in accordance with the policy, with a focus on teaching, research and service activities, (Alzafari, K., & Ursin, J. (2019).

The implementation of the internal quality assurance system (SPMI) in higher education is achieved through the establishment of a Quality Assurance Unit, Establishment of standards, Implementation of Standards, Evaluation of standard implementation, Control of standard implementation and Improvement of standard implementation (PPEPP). The PPEPP cycle by adopting the Kaizen Model, which is a continuous improvement model from Japan that can encourage organizations towards high competitiveness without large investment through the stages of Determination, Implementation, Evaluation, Control and Improvement, Smadi, S. (2009) and Tetteh, H. (2012)



Widya Mandira Catholic University (Unwira) is a private university in East Nusa Tenggara (NTT) that has carried out the SPMI framework using stages such as Application, Implementation, Evaluation, Control, and Improvement to achieve the Vision, Mission, Goals, and Goals in order to achieve the vision, (Mulyani, S., et al. [2022](#))

In 2021, Unwira has 21 study programs and 7 faculties with excellent institutional accreditation supported by 9 study programs with B accreditation and 12 C accredited study programs. This system is part of the institution's efforts to ensure that every educational process runs according to the quality standards set by the government, as well as to facilitate continuous evaluation and improvement.

Implementation of KPIs in Higher Education: A Study by Tsinidou et al. ([2010](#)) found that the implementation of KPIs in educational institutions can significantly improve the quality of education, especially in the aspects of student services, academic quality, and graduate outcomes. KPIs also help in mapping the performance of individual lecturers and study programs, as well as providing a solid foundation for continuous improvement.

KPIs in the Context of SPMI: Abdullah ([2012](#)) emphasized that KPIs in SPMI must measure key dimensions such as the learning process, graduate quality, research, community service, and administrative and financial management. KPIs allow educational institutions to compare their internal performance with national or international quality standards, as set by the National Accreditation Board for Higher Education (BAN-PT).

Digitization of Quality Processes: According to Adams (2018), digital platforms such as e-SPMI facilitate real-time data management, reporting, and quality monitoring. Digitalization enables more efficient, fast, and accurate data storage, as well as easier access for stakeholders to monitor KPI development. Advantages of Using Electronic Systems: A study by Gaebel et al. ([2012](#)) states that the digitization of SPMI through the e-SPMI platform allows data integration between departments, increases transparency and accountability, and encourages cross-field collaboration. This is very important in achieving accreditation standards and improving the reputation of the institution in the national and international arena.

In this article, we will review relevant literature related to SPMI management based on e-SPMI KPIs in universities, especially at Widya Mandira Catholic University. The focus of this article's study includes; a). How the implementation of e-SPMI KPIs compares to the concept of quality management in higher education, and b). Impact on institutions implementing quality assurance systems based on e-SPMI KPIs.

Method

This research was conducted from 2022 and 2023 at Widya Mandira Catholic University at the Unwira Quality Assurance Institute (LPM). The method used in this study uses a quantitative and qualitative approach with a case study method. Data collection techniques through direct observation, document and archive searches, and in-depth interviews.

Results and Discussion

Result

a). Implementation of e-SPMI at Unwira.

Data from interviews and direct observations in implementing SPMI, Unwira has SPMI Determination Principles, namely SPMI Policy, SPMI Manual book, SPMI Standard book, and SPMI Form Book. To implement the determination document,

Unwira through LPM develops SPMI by identifying the main indicators of each standard set with a mechanism like figure 1.

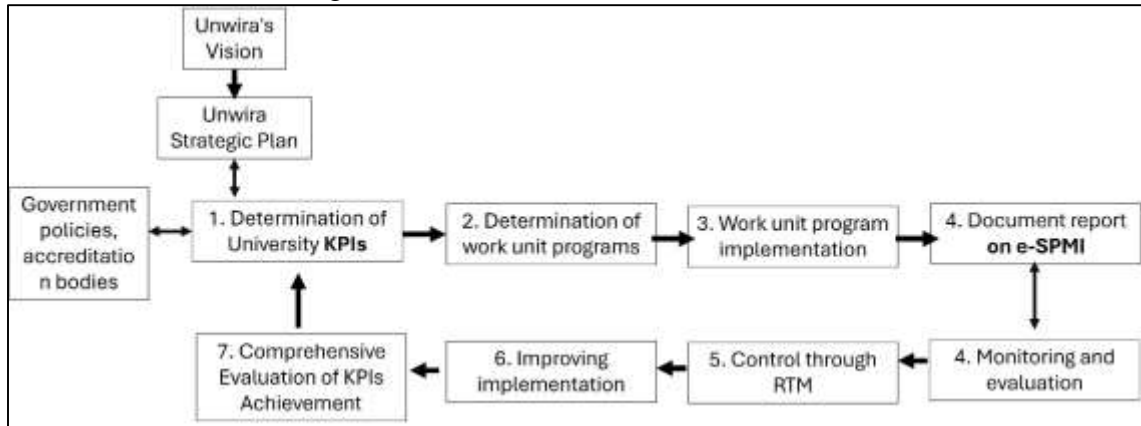


Figure 1. KPIs e-SPMI Based Work Program Cycle

Based on figure 1, it can be explained that the determination of Unwira's main performance indicators is determined, namely:

- 1). **Determination of the Level of PT.** The determination is carried out by the following steps: The drafting team identifies the findings from the results of the AMI in the previous year, identifies SPMI indicators based on the Regulation of the Minister of Higher Education, identifies vision achievement indicators, and identifies BAN PT/LAM accreditation indicators. Based on this identification, the Rector determines the indicators of the Unwira and Budget Work Plan (RKA) that must be implemented by the work unit. The Drafting Team compiled the SPMI Indicators as KPIs in the e-SPMI digital system so as to help the KPIs-eSPMI model.
- 2). **Determination of the level of work units.** The determination of Work Units is carried out based on the main tasks and functions. The work unit establishes a work plan based on the rector's work program indicators and implements the program according to the budget ceiling that has been prepared.
- 3). **Implementation of SPMI indicators.** Each work unit records the documents that have been carried out based on the SPMI indicator bill and reports on the e-SPMI system with their respective accounts.
- 4). Each work unit reports SPMI documents in accordance with the needs of indicators and conducts self-evaluation of the reasons for the reasons why the documents have not been fulfilled.
- 5). **Evaluation** is carried out, namely the work unit can request a quality assurance group by LPM/Quality Assurance Group through the Auditor based on a letter of assignment from the Rector. Auditors conduct document audits through e-SPMI and Field Audits to confirm data. Furthermore, LPM summarized the assessment data and auditor's findings from e-SPMI
- 6). **Control** carried out at Unwira through Management Review Meetings (RTM) at the faculty level and at the university level. Each faculty leader reports indicators and standards that have not been met and those that have been met, the university leader responds and gives recommendations for improvement. For the indicators that are met, it is necessary to set out in the Decision to improve its implementation by each work unit.
- 7). Each work unit reports its performance to the leadership in accordance with the determination of the activity plan and budget that has been set.



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- 8). Improvement is carried out based on the results of RTM, namely indicators that are met need to be stipulated in the Decision to improve its implementation by each work unit and SOP is made. Furthermore, the Rector formed a Drafting Team to review the SPMI standar indicators that need to be determined in the following year. The indicators of the study results are determined through the Rector's Determination Decree (back to step 1)

Based on the data on e-SPMI in 2022/2023 and 2023/2024, it can be shown through the following figure 2:

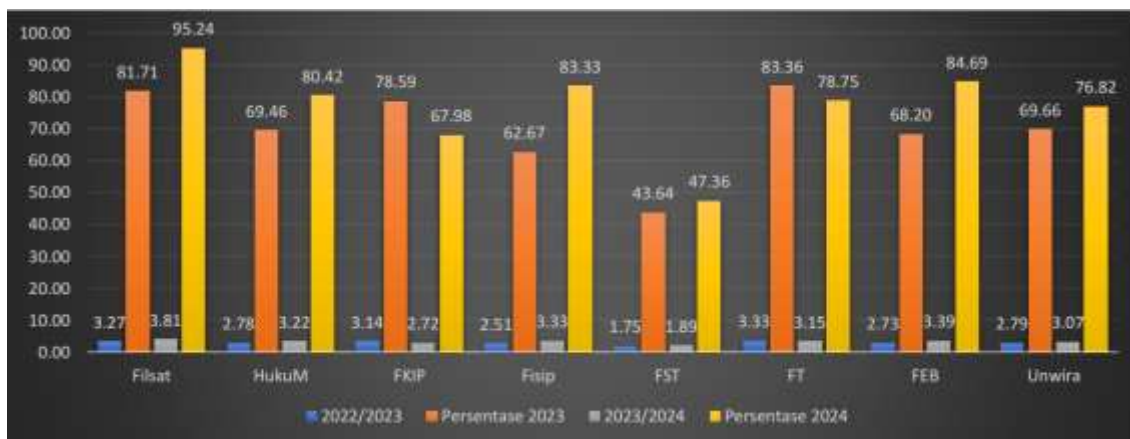


Figure 2 Achievement of SPMI indicator scores from each Faculty at Unwira for the last 2 years

b). Impact on institutions implementing quality assurance systems based on e-SPMI KPIs

The impact of SPMI management based on e-SPMI KPIs is very visible from the increase in accreditation scores.

Table 1 Achievements of Unwira e-SPMI

Year/Aspect	2021	2022	2023
Accreditation B/Very Good	9	15	19
Accreditation C/Good	12	6	2
SPMI Unwira Score	2.5	2.79	3.07
Percentage	62.5	69.75	76.75

In addition to these achievements, based on interview data, it was obtained that each study program felt that all accreditation documents were in SPMI so that each reaction process only narrated from the document. Based on the support of the interview data, namely; **The advantage** of digital-based SPMI management/e-SPMI is that it can collect and record the achievement of the vision, every month the work unit can import documents on the e-SPMI KPIs system, the achievement of the prediction of the accreditation score of the Study Program, and can evaluate itself against the quality of quality management. **The weakness** is the lack of monitoring from the leadership in e-SPMI, has not been integrated with the IT system which is the main activity at the university, and monitoring activities in accordance with the budget used has not been effectively carried out in e-SPMI.



Discussion

The implementation of SPMI at Unwira has carried out the Kaizen model, namely Determination, Implementation, Evaluation, Control and Improvement. Key factors for the success of Kaizen implementation include change initiation and evaluation, management support, evaluation systems, internal communication systems, and employees' strategic orientation to change (Janjić, V. et al. (2020). The SPMI indicators set at Unwira are a combination of government policy indicators and institutional policies. The determination of indicators carried out at Unwira is carried out by the work unit in accordance with the determination carried out at the university. This suggests that performance indicators in higher education can measure performance outcomes, equitable access, social relevance, and financial sustainability, but their use can also generate inspiration and innovation for improvement, (Sarrico, C. (2022).

The implementation of SPMI is carried out at Unwira by each work unit and reported through e-SPMI. This is done by Unwira in accordance with the current demands that digital transformation in higher education is needed for significant changes in the processes and solutions anticipated to solve various problems, (Rof, A., et.all, (2020). This model has been widely practiced in the world in managing SPMI, for example the Heutagogy Model (Arifin, M & , D. (2023), BPEP model; Baldrige Performance Excellence Program, (Maciel-Monteon, M. Et all. (2020), Fuzzi Model (Keshta, I. (2019), (Dai, J et.all. (2023), and various other models. Unwira has developed an e-SPMI KPIs model and is effective for increasing accreditation scores for all existing study programs.

The implementation of the e-SPMI KPIs model at Unwira with a two-stage trial shows positive and negative impacts. However, dand implementing an effective internal quality assurance system (SPMI based on the e-SPMI KPIs model in higher education involves the use of Key Performance Indicators (KPIs) for accreditation, a robust data management system, and continuous improvement (Javed, Y., & Alenezi, M. (2023). The challenges in the implementation carried out by Unwira are the limitation of human resources, the urgency of change for each work unit. According to Altbach (2015), challenges in the implementation of KPIs in higher education include limited resources, resistance to change, and lack of understanding of the importance of performance indicators for institutional development. Therefore, training and mentoring related to the use of KPI and e-SPMI are essential to overcome this challenge. However, Unwira has made quality improvements for Accreditation: Schindler et al. (2015) noted that good KPIs and an effective e-SPMI system can contribute directly to the accreditation process of higher education institutions. KPI can be used as a tool to prepare accreditation documents and measure the institution's conformity with BAN-PT standards and international accreditation. Data-Based Evaluation: Research by Zairi (2012) shows that data-driven decision-making resulting from KPIs allows for more accurate and measurable evaluations. This is important in improving the quality of academic and administrative processes in higher education.

Some of the weaknesses of the implementation of the e-SPMI KPIs model are that the measurement of Control and Improvement is not well documented. Therefore, several things have been done by Unwira, including a tiered evaluation up to the university level, but this needs to be combined with the commitment of the leadership. Several work units need training and socialization: Providing training to lecturers and education staff regarding the importance of KPIs and how to use e-SPMI to facilitate data collection and analysis.



Conclusion

Based on the results and discussions, it can be concluded that SPMI Management is based on e-SPMI KPIs which has been carried out for 2 years with achievements, namely 2022 with a score of 2.5 out of a maximum score of 4 or 69.75%, and in 2023 with a score of 3.07 out of a maximum score of 4 or 76.75%. Some of the obstacles to the implementation of the e-SPMI KPIs model are the poorly documented measurement of Control and Improvement. Therefore, several things have been done by Unwira, including a tiered evaluation up to the university level, but this needs to be combined with the commitment of the leadership. Several work units need training and socialization: Providing training to lecturers and education staff regarding the importance of KPIs and how to use e-SPMI to facilitate data collection and analysis. The e-SPMI KPIs model has advantages and disadvantages, so it needs continuous improvement to become a superior accredited university.

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