



Developing a Predictive Accreditation Simulator: A Strategic Quality Gateway for Private Universities in Indonesia

Syaiful Bachri, Eko Ruddy Cahyadi, Yunus Triyonggo

Institut Pertanian Bogor, Indonesia

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CORRESPONDENCE

Name: Syaiful Bachri
Email:
690438syaiful@apps.ipb.ac.id

ABSTRACT

The accreditation landscape for private universities under the oversight of LLDIKTI Wilayah III in Indonesia is characterized by significant disparities in institutional readiness and compliance with national standards. Current data highlight a pressing need for strategic intervention, as a considerable proportion of institutions remain within the "yellow" and "red" zones of accreditation preparedness. In response to this challenge, this study analyzes the critical factors influencing the effectiveness of accreditation facilitation and formulates evidence-based strategies for its enhancement. Employing a mixed-methods approach, the research integrates comprehensive accreditation mapping, stakeholder interviews, and multi-layered analytical frameworks, including Internal Factor Evaluation (IFE), External Factor Evaluation (EFE), SWOT, and the Analytical Hierarchy Process (AHP). The findings identify organizational commitment and institutional readiness as the most determinants of accreditation success, with internal quality assurance units acting as pivotal actors. Consequently, the study proposes the development of a predictive accreditation simulator, designed to align with specific institutional typologies and internal quality assurance systems. Conceptualized as a strategic quality gateway, this tool is intended to enable proactive readiness assessment, foster continuous improvement, and strengthen institutional resilience. Ultimately, it aims to ensure consistent alignment with national standards and promote sustainable quality assurance practices within Indonesia's private higher education sector.

INTRODUCTION

Higher education institutions (HEIs) are critical engines for human capital development, particularly in navigating the complexities of the 4th Industrial Revolution. Within the global landscape, the quality of a nation's higher education system is a key determinant of its competitiveness. As evidenced by the IMD World Competitiveness Ranking (IMD WCR, 2024), where Indonesia ranks 27th out of 67 countries, there remains significant room for improvement, with the higher education sector being a primary focal point for enhancing knowledge-based national development.

According to the Higher Education Data System (*Pangkalan Data Pendidikan Tinggi*, PDDIKTI), Indonesia had 4,372 active higher education institutions in 2024. Of these, 2,904 higher education institutions are supervised by the Ministry of Education, Culture, Research, and Technology, comprising 2,080 academic and 824 vocational institutions. The remaining are supervised by ministries such as the Ministry of Religion, Defence, and other technical ministries. Given the significant number of institutions under its supervision, the Ministry of Education, Culture, Research, and Technology plays a central role in maintaining and improving the quality of higher education in Indonesia. Therefore, misguided policies can potentially have a widespread impact on the quality of higher education institutions in Indonesia (PDDIKTI, 2024).

The national higher education system continues to develop with the increase in students and study programs, but still faces governance and quality assurance challenges. As stated by Hill & Wie (2012), the quality of higher education in Indonesia varies greatly, and institutional management, particularly in public universities, is still hampered by complex bureaucracy and low transparency. Meanwhile, the transformation of the legal status of some PTNs into State-Owned Legal Entities has introduced

new dynamics that impact social aspects and structural relationships within academic activities (Singgih et al., 2022).

Additionally, accreditation issues are also a key focus in quality assurance efforts. Accreditation bodies must accommodate the needs of vulnerable student groups, including first-generation students, those from economically disadvantaged backgrounds, and minority groups (Barber & McNair, 2017). Although independent bodies carry out accreditation, their relationship with higher education institutions is still largely governed by contractual principles, which often hinder flexibility in quality development (Graca, 2009).

As policymakers, the government must ensure that the quality of higher education in Indonesia continues to improve. Based on Minister of Education, Culture, Research, and Technology Regulation Number 60 of 2023, the Higher Education Service Institution (*Lembaga Layanan Pendidikan Tinggi*, LLDIKTI) is tasked with facilitating improvements in the quality of higher education delivery in each designated working area. The LLDIKTI Wilayah I to XVII perform various important functions, such as quality mapping, assisting in external quality assurance, and facilitating the establishment and closure of study programs (Permendikbudristek, 2023b). One of the most densely populated and strategically important regions is the LLDIKTI Wilayah III, which oversees 262 private higher education institutions (*Perguruan Tinggi Swasta*, PTS) with a total of over 677,000 students (PDDIKTI, 2024). This is based on data shown in Figure 1.

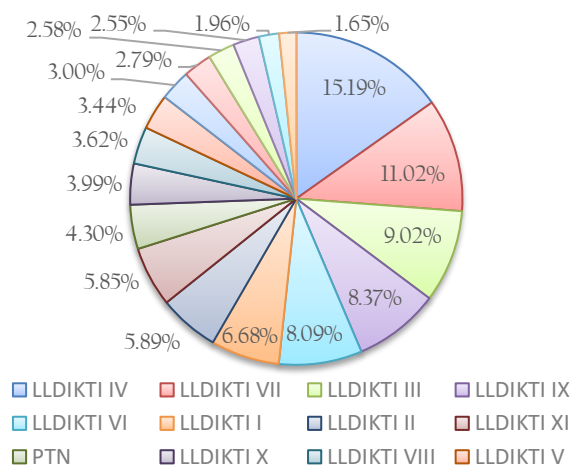


Figure 1: Distribution of Private Universities in Indonesia

In addition to the uneven distribution of private higher education institutions in Indonesia, many institutions are also not functioning according to established regulations. During the 2022-2024 period, 87 PTS were subject to administrative sanctions, including license revocation (44.83%) and cessation of supervision (39.08%). Common factors leading to sanctions include the issuance of invalid diplomas, expired accreditation, violations of the Higher Education Standards (*Standar Nasional Pendidikan Tinggi*, SNDikti), submission of invalid data to the Higher Education Data System (PDDIKTI), and internal organisational conflicts (Ditjen Diktiristek, 2024).

Non-compliance with accreditation regulations is a serious issue because accreditation is the cornerstone of the higher education quality assurance system. Accreditation is a quality assessment tool and guarantees that institutions can provide credible and sustainable educational services (Netshifhefe et al., 2016). Quality assurance also encompasses proactive internal practices in fostering a quality culture (Chen & Hou, 2016).

As a form of regulatory strengthening, the government issued Minister of Education, Culture, Research, and Technology Regulation Number 53 of 2023, which integrates the internal quality assurance system (*Sistem Penjaminan Mutu Internal*, SPMI), accreditation, and national standards for higher education (Permendikbudristek, 2023a). Implementation of SPMI is mandatory in all higher education institutions and covers the stages of planning, implementation, evaluation, control, and continuous quality improvement. At the institutional level, SPMI also adopts the principles of total quality management (TQM) as a strategic approach to achieving consistent quality.

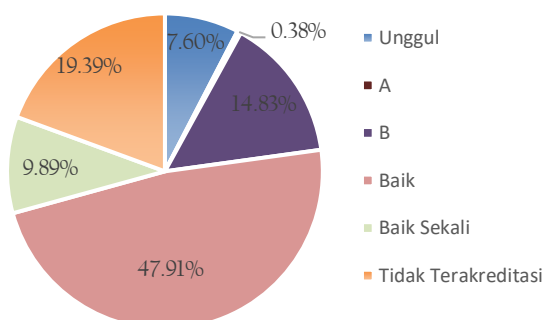


Figure 2: Distribution of LLDIKTI Wilayah III accreditation

The LLDIKTI Wilayah III has taken various strategic steps to improve the quality of its affiliated private higher education institutions, such as mapping and periodic monitoring and evaluation, institutional assistance, organising quality workshops, and verifying SPMI documents. However, according to PDDIKTI 2024 data (Figure 2), the accreditation status of institutions in this region remains varied: 129 PTS (49.24%) are classified as "Good," while 48 PTS (18.32%) either do not have or have not obtained active accreditation. Nationally, these 48 PTS represent 14.41% of the total unaccredited PTS, placing the LLDIKTI Wilayah III at the top of this category. This situation underscores the urgency of formulating a more systematic, integrated, and sustainable strategy for improving the quality and accreditation of PTS. There needs to be synergy between government agencies, the LLDIKTI, and the PTS in building a quality culture that is adaptive to changes in the times, while ensuring that higher education transformation in Indonesia remains within the framework of quality and accountability.

Therefore, this study has a twofold purpose: (1) to critically analyse the factors influencing the effectiveness of LLDIKTI Wilayah III's facilitation of institutional accreditation for private universities, and (2) to formulate evidence-based, priority strategies for improving accreditation outcomes. Moving beyond conventional descriptive or compliance-focused studies, this research introduces novelty by developing a conceptual framework for a predictive accreditation simulator. This data-informed tool, aligned with institutional typology and SPMI frameworks, is designed to act as a strategic gateway, enabling PTS to self-assess readiness and fostering a continuous improvement cycle. By addressing this specific problem within Indonesia's strategically vital yet challenged tertiary education sector, this study offers insights with potential relevance for similar facilitator agencies in emerging higher education systems globally.

METHOD

This study employed a mixed-methods approach to address its dual objectives (Creswell & Clark, 2017). A sequential explanatory design was utilised, beginning with qualitative strategic analysis to identify key factors, followed by a quantitative method to prioritise the formulated strategies.

A comprehensive strategic analysis was conducted to achieve the first objective to analyse the factors influencing LLDIKTI Wilayah III's facilitation effectiveness. This process integrated internal and external appraisals. Internally, a VRIO (Value, Rarity, Imitability, Organisation) framework was applied to assess the organisation's resources and capabilities in creating a competitive advantage in accreditation facilitation (Knott, 2015). Externally, a PESTLE (Political, Economic, Social, Technological, Legal, Environmental) analysis was employed to scan the macro-environmental factors affecting its performance (Yuksel, 2012). The insights from VRIO and PESTLE were subsequently operationalised and weighted using strategic management matrices: the Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) (David, 2011). The synthesised scores from these matrices were then integrated into a SWOT analysis to derive strategic alternatives based on LLDIKTI's positional advantage (GÜREL, 2017).

Data for this phase were collected from both primary and secondary sources. Primary data were gathered through in-depth

interviews with key stakeholders, selected via non-probability purposive sampling to ensure the respondents possessed direct knowledge and experience of the accreditation facilitation processes at LLDIKTI Wilayah III (Patton, 2022). Secondary data were obtained through a systematic review of relevant regulations, institutional reports, accreditation documents, and prior scholarly studies (Page et al., 2021).

To address the second objective, which is formulating priority strategies, the Analytical Hierarchy Process (AHP) was utilised (Saaty, 2008). This method was chosen for its robustness in handling multi-criteria decision-making (MCDM) and deriving measurable priority weights from expert judgments (Ho & Ma, 2018). Data collection for AHP involved distributing pairwise comparison questionnaires to a panel of experts, including leaders and working groups within LLDIKTI Wilayah III, as well as academics specialising in higher education quality assurance. The conceptual understanding for structuring the AHP hierarchy was initially refined through the earlier in-depth interviews. The collected data were processed to calculate priority weights and consistency ratios, culminating in a ranked list of evidence-based strategic recommendations (Ishizaka & Labib, 2011).

RESULTS AND DISCUSSION

The purpose is to critically analyse the factors influencing the effectiveness of LLDIKTI Wilayah III's facilitation of institutional accreditation for private universities.

VRIO Analysis

In formulating strategies to improve the accreditation of PTS, it is important to understand the internal strengths of the LLDIKTI Wilayah III. One approach used to analyse these strengths is the VRIO framework. This analysis identifies whether a resource or capability can create a sustainable competitive advantage in the context of quality improvement and accreditation services for PTS.

By applying the VRIO framework, this study aims to categorise the various resources and capabilities identified through in-depth interviews and documentation studies to determine which can become competitive advantages for the LLDIKTI Wilayah III in accelerating the accreditation of private higher education institutions. The results of this VRIO analysis also serve as the basis for determining the internal factors included in the IFE (Internal Factor Evaluation) analysis and developing strategies during the SWOT analysis phase. Therefore, the following discussion will systematically outline each resource and capability based on the four VRIO dimensions, while assessing their strategic significance in improving the accreditation of PTS institutions in the LLDIKTI Wilayah III working area. The results of this NVIVO analysis are then used as the basis for compiling a classification table of internal factors based on the VRIO dimensions, which will be further utilised in the Internal Factor Evaluation (IFE) analysis and strategy development within the SWOT matrix.

Table 1 VRIO Analysis Matrix

No	Factor Description	Valuable	Rare	Inimitable	Organised
1	Work culture	V	X	X	X
2	Sustainable Human Resource Development Culture	V	V	V	V
3	Digitalisation of quality audits	V	V	X	X
4	Periodic evaluation of program effectiveness	V	X	X	X
5	The geographical and structural proximity of LLDIKTI Wilayah III to the central Ministry	V	V	V	V
6	Reliability of Regional Facilitators	V	V	V	V
7	The visionary and innovative leadership of the Head of LLDIKTI Wilayah III	V	V	V	V
8	Availability of Human Resources	V	X	X	X
9	Adequate HR Qualifications and Competencies	V	V	V	V
10	LLDIKTI Wilayah III facilitates scientific publication in journals	V	V	X	X
11	LLDIKTI Wilayah III facilitates international programs	V	V	V	V
12	LLDIKTI Wilayah III encourages the implementation of a quality culture in PTS	V	X	X	X
13	LLDIKTI Wilayah III becomes another LLDIKTI benchmarking location	V	V	V	V
14	Monitoring and evaluation based on PTS conditions	V	V	V	V
15	LLDIKTI Wilayah III employees carry out their duties and functions optimally and provide excellent services to the community	V	V	X	X
16	Understanding of SPMI	V	X	X	X
17	Utilisation of digital information systems for services	V	X	X	X
18	Awarding of appreciation to high-achieving PTS	V	X	X	X
19	Mapping of higher education institutions (Typology)	V	V	V	V
20	Registration of Intellectual Property Rights (IPR) for the PTS development system and methods	V	V	X	X
21	Collaborative approach (Asih-Asuh Program)	V	V	V	V
22	Structured, systematic, and problem-solving-based mentoring approach	V	V	V	V
23	Use of digital systems for quality monitoring	V	X	X	X

No	Factor Description	Valuable	Rare	Inimitable	Organised
24	Implementation of Facilitative Clinics for Private Universities (PTS)	V	V	X	X
25	Implementation of PEPA Clinical Training	V	V	X	X
26	Implementation of socialisation, technical guidance, and education regarding quality assurance for PTS	V	X	X	X
27	Implementation of the Learning Management System – SPADA	V	V	X	X
28	The program is running with adjustments following the budget efficiency policy.	V	X	X	X
29	The ongoing process through SPMI is a form of adaptation to changes	V	V	X	X
30	The organisational structure of LLDIKTI Wilayah III is adaptive and supports quality improvement.	V	V	X	X
31	Periodic public satisfaction survey	V	X	X	X

Table 1 presents eleven aspects that qualify as sources of sustained competitive advantage because they satisfy all VRIO criteria (Jay Barney, 1991). These primarily concern human capital excellence (J. B. Barney & Wright, 1998), visionary leadership (Finkelstein & Hambrick, 1996), an adaptive organisational structure, and a distinctive mentoring and facilitation model. A further nine aspects provide only a temporary competitive advantage: they are valuable and sometimes rare but remain comparatively easy for other institutions to imitate (e.g., quality-audit digitisation and facilitative training) (Piccoli & Ives, 2005). The remaining eleven aspects fall under competitive parity; while valuable, they lack sufficient rarity or inimitability and largely reflect routine activities typical of government agencies (Ray et al., 2004).

PESTLE Analysis

In designing a strategy to improve the accreditation of PTS, it is necessary to not only understand internal organisational factors but also to have a deep understanding of various external factors that can affect the effectiveness of policies and interventions carried out by the LLDIKTI Wilayah III. For this purpose, this study employs the PESTLE (Political, Economic, Social, Technological, Legal, and Environmental) approach as a framework for analysing the relevant external environmental dynamics.

PESTLE is a strategic scanning framework to map macro-environmental opportunities and threats. This study uses the analysis to identify conditions that LLDIKTI Wilayah III can leverage and risks that must be anticipated when formulating strategies to improve the institutional accreditation of private higher education institutions (PTS). The outputs inform the External Factor Evaluation (EFE) matrix. They are subsequently synthesised within the SWOT formulation, providing a structured basis for understanding the external context shaping LLDIKTI's performance and its support for PTS across the jurisdiction. Based on the classification of 26 relevant external aspects, the domains exerting the most significant influence on accreditation dynamics at the PTS level are social, political, legal, and technological.

Table 1: Classification of Aspects in PESTLE

No.	Aspect	PESTLE Category
1	Budget allocation of the Organising Body for the PTS quality assurance	Economic
2	PTS's enthusiasm for quality improvement programs	Social

No.	Aspect	PESTLE Category
3	Costs for implementing the study program accreditation by LAM	Legal
4	Helpdesk on the SPMI digital service page	Technological
5	Helpdesk for qualitative justification by PTS on the SAPTO application	Technological
6	Diversity of Leading Private Universities	Social
7	Government policy encourages the sustainable transformation of quality culture.	Political
8	The policy of separating ministries is considered appropriate and has strategic value.	Political
9	The need for a policy to increase authority in the LLDIKTI	Political
10	Reliability of the PDDIKTI website	Technological
11	Reliability of the Internal Quality Assurance System website	Technological
12	Reliability of PTS resources using a digital quality assurance system	Social
13	Reliability of PTS resources in implementing quality training results	Social
14	Collaboration between private universities in improving quality	Social
15	Obligations of the LLDIKTI Wilayah III for system integration at the National Data Centre	Technological
16	The constellation of private universities in Jakarta is a barometer of national higher education.	Social
17	Legitimacy of the duties and functions of the LLDIKTI	Legal
18	PTS's interest in re-accreditation	Social
19	Participation of PTS in the LLDIKTI Wilayah III program	Social
20	Understanding of SPMI in the Organising Body and/or PTS	Social
21	Changes in central government policy	Political
22	Change of person in charge (PIC) at PTS	Social
23	Synchronisation of applicable regulations	Legal

No.	Aspect	PESTLE Category
24	Socialisation of policies and regulations from the central government	Legal
25	Standardisation of accreditation instruments at the Independent Accreditation Institution (LAM)	Legal
26	The State Budget policy encourages the LLDIKTI Wilayah III to adapt and innovate	Political

Based on Table 2, political factors are pivotal. Government policies that cultivate a sustained quality culture have been the principal drivers of accreditation improvements (Tight, 2021). These include strategic ministerial restructuring and shifts in central-government policy that directly reshape LLDIKTI Wilayah III's role and authority as a facilitating body. Conversely, regulatory uncertainty and the unresolved need to strengthen LLDIKTI's mandate signal structural challenges that require continued policy advocacy (Scott, 2021).

Economic factors are reflected in the limited budget allocation from the organising body for PTS quality assurance programs, as well as the high cost of accreditation by the Independent Accreditation Agency (Lembaga Akreditasi Mandiri, LAM). This condition poses a real obstacle for small and medium-sized PTS with limited financial resources, thereby impacting the low participation of institutions in accreditation (Duarte & Vardasca, 2023).

From a social perspective, the enthusiasm and participation of PTS in quality improvement programs show varying trends. The diversity of characteristics of leading PTS in the Jakarta area shows that social conditions and institutional perceptions also contribute to the readiness of institutions to meet accreditation standards (Alaskar et al., 2019).

Meanwhile, technological factors are having an increasingly significant impact. The reliability of digital systems such as PDDIKTI and the availability of SAPTO application helpdesks are crucial in supporting the smooth running of quality assurance processes (Selwyn, 2022). However, the quality of PTS human resources in operating digital systems remains challenging, indicating that digital transformation is not yet fully optimal in all institutions (Fernández et al., 2023).

Legal. Regulatory misalignment, uneven standardisation of LAM accreditation instruments, and the mandate to integrate data into the National Data Centre without local backup provisions create implementation complexities at the operational level (Celis & Véliz, 2022). These conditions introduce administrative and operational risks that LLDIKTI and PTS must anticipate and mitigate strategically. Environmental. No salient factors emerged, as sustainability considerations and physical environmental impacts are not yet central to institutional accreditation assessments in Indonesia.

Overall, the results of this PESTLE analysis indicate that strategies to improve PTS accreditation must carefully consider external factors, particularly government policies, legal dynamics, and technological support, as key factors in formulating policies and planning interventions by the LLDIKTI Wilayah III (Duarte & Vardasca, 2023).

Internal Factor Analysis

In-depth interviews with leaders at LLDIKTI Wilayah III surfaced strategic issues related to institutional accreditation support for private higher education institutions (PTS). Candidate factors were shortlisted based on their frequency of mention, salience for quality improvement, and alignment with LLDIKTI Wilayah III's statutory duties and functions. The resulting set of fifteen internal factors was then subjected to a paired-comparison analysis to derive priority weights, which informed the formulation of more targeted, evidence-based internal strategies.

Based on the Internal Factor Evaluation (IFE) matrix, the composite internal score is 3.2857, with university mapping (typology) emerging as the strongest contributor with a weighted score of 0.3810, followed by the reliability of regional facilitators with a weighted score of 0.3714, and the visionary and innovative leadership of the Head of the LLDIKTI Wilayah III with a weighted score of 0.3238. The findings reflect an excellent internal position, particularly in leadership, facilitation, and data-driven mapping, which serve as the primary foundation for the development and quality improvement process in private higher education institutions (PTS).

Meanwhile, the weakness that needs to be addressed is the culture of sustainable human resource development, with a weighted score of 0.1333. This finding indicates that although the quality of human resources is quite competent, the quantity and sustainability of the culture of capacity development remain a challenge that needs to be addressed immediately through institutional strengthening policies and programs.

External Factor Analysis

The identified external factors were synthesised into 16 factors. Based on the external factor matrix calculation, the overall value of external factors is 2.4938, with opportunities contributing the most, namely the standardisation of accreditation instruments at the Independent Accreditation Agency (LAM) with a weighted score of 0.3500, synchronisation of applicable regulations with a weighted score of 0.2917, the obligation of the LLDIKTI Wilayah III to integrate the system with the National Data Center with a weighted score of 0.2750, and the interest of PTS in re-accreditation with a weighted score of 0.2500. These findings indicate that the external environment provides ample strategic opportunities for the LLDIKTI Wilayah III to enhance the effectiveness of its role in the quality development of PTS.

As for threats, the following require attention: the cost of program accreditation by LAM with a weighted score of 0.1833, the helpdesk for qualitative justification by PTS on the SAPTO application with a weighted score of 0.1542, and the budget allocation by the Implementing Agency for PTS quality assurance with a weighted score of 0.0813. These findings indicate that although quantitatively fewer than opportunities, these factors remain a serious concern as they could hinder the effectiveness of the LLDIKTI Wilayah III program if not adequately addressed.

SWOT Analysis

This analysis aims to determine alternative organisational strategies based on the quadrant position in the internal-external (IE) matrix. Based on the IFE and EFE matrix calculations in the LLDIKTI Wilayah III, the overall IFE score was 3.2857, and the overall EFE score was 2.4938. Referring to the commonly used weighting scale in the IE matrix, the interpretation of the

LLDIKTI Wilayah III's position is in quadrant IV, which is the "grow and build" strategy.

Based on the SWOT matrix in Table 3, and considering the position of the LLDIKTI Wilayah III in quadrant IV of the IE matrix, namely grow and build, the chosen strategy is an aggressive strategy with a tactical approach that integrates key strengths and external opportunities. These strategies are designed to respond to key issues in improving the accreditation of private higher education institutions in a more systematic, adaptive, and data-driven manner. The selected strategies developed through the matching approach are as follows:

1. Development of a simulation system for accreditation assessment based on typology and SPMI ($S7 + S8 + S12 + O3 + O6 + O9$)
 2. Expansion of the initiative to merge private higher education institutions ($S8 + S7 + S10 + O1 + O2 + O6$)
 3. Intensive accreditation assistance for private higher education institutions ($S2 + S10 + O6 + O9$)
 4. Intervention through thematic quality audits at PTS ($S8 + S7 + T1$)
 5. Facilitation of SPMI understanding digitalisation ($W3 + O3 + O9$)
- Synergy of resources between PTS based on typology ($W2 + T1$)

Table 2 SWOT Matrix

IFAS EFAS	Strength 1. The geographical and structural proximity of LLDIKTI Region III to the central ministry 2. The reliability of regional facilitators at LLDIKTI Region III 3. The visionary and innovative leadership of the Head of LLDIKTI Region III 4. The adequate qualifications and competencies of human resources at LLDIKTI Region III 5. LLDIKTI Region III facilitates international programs 6. LLDIKTI Region III serves as a benchmarking location for other LLDIKTI regions 7. Monitoring and evaluation based on the conditions of private higher education institutions (PTS) in LLDIKTI Region III 8. Mapping of higher education institutions (typology) in LLDIKTI Region III 9. Collaborative approach (mentoring program) in LLDIKTI Region III 10. Structured, systematic, and problem-solving-based mentoring approach in LLDIKTI Region III 11. Organization of facilitative clinics for private higher education institutions in LLDIKTI Region III 12. Continuous process through SPMI as a form of adaptation to changes in LLDIKTI Region III	Weaknesses 1. A culture of sustainable human resource development at LLDIKTI Region III 2. Availability of human resources at LLDIKTI Region III 3. Understanding of SPMI at LLDIKTI Region III
	Opportunity 1. Government policies encourage sustainable quality culture transformation 2. The need for policies to increase authority in LLDIKTI 3. Reliability of the PDDIKTI website 4. Obligation of LLDIKTI Region III to integrate systems in the National Data Center 5. Legitimacy of the duties and functions of LLDIKTI 6. Interest of private higher education institutions in re-accreditation 7. Changes in central government policy 8. Synchronization of applicable regulations 9. Standardization of accreditation instruments at the Independent Accreditation Agency (LAM)	WO Strategy Facilitate the digitization of SPMI understanding ($W3 + O3 + O9$)
	Threats 1. Budget allocation by the Implementing Agency for PTS quality assurance 2. Costs of program accreditation by LAM 3. Helpdesk on the SPMI digital service page 4. Helpdesk for qualitative justification by PTS on the SAPTO application 5. The Ministry's separation policy is considered appropriate and strategically valuable 6. Reliability of the Internal Quality Assurance System website	WT Strategy Synergy of resources between private universities based on typology ($W2 + T1$)
	SO Strategy 1. Development of a typology-based accreditation assessment simulation system and SPMI ($S7 + S8 + S12 + O3 + O6 + O9$) 2. Expansion of the PTS merger initiative ($S8 + S7 + S10 + O1 + O2 + O6$) 3. Intensive accreditation support for private higher education institutions ($S2 + S10 + O6 + O9$)	
	ST Strategy Intervention through thematic quality audits at PTS ($S8 + S7 + T1$)	

Analytical Hierarchy Process

To formulate a strategy for improving the accreditation of private higher education institutions in the working area of the LLDIKTI Wilayah III, the AHP approach was used to systematically and measurably prioritise strategies. This AHP was developed based on four main components: primary focus, factors, actors, and strategic alternatives. In initiating the AHP approach, the internal and external factors identified through SWOT analysis were further analysed and classified based on the tasks and functions of the LLDIKTI as outlined in Ministerial Regulation Number 35 of 2021 on Education, Culture, Research, and Technology. (Permendikbudristek, 2021). This approach aims to group various strategic factors into more structured and representative main categories, simplifying the AHP pairwise comparison process and strengthening conceptual validity. This classification step is carried out through a thematic content grouping approach, where each factor is examined based on its substantive meaning and strategic role in institutional quality improvement and accreditation. This process resulted in four

main factors: organisational capacity, institutional capability enhancement, organisational commitment and readiness, and government policy and regulatory support.

As a continuation of the factor classification stage, the next step in developing the AHP framework is to determine the key actors who play a strategic role in implementing the strategy to improve the accreditation of private higher education institutions. Based on the analysis of institutional tasks and functions outlined in Ministry of Education, Culture, Research, and Technology Regulation No. 35 of 2021, as well as observations of field dynamics, three leading actors were identified that represent cross-level involvement in the accreditation ecosystem: the quality assurance working group, the institutional and partnership working group, and the learning, student affairs, and achievement working group.

Table 3 Factor Weight Assessment

Factor	Weight	Priority
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Organisational commitment and readiness	0,3954	1
Improving institutional capabilities	0,2650	2
Government policy and regulatory support	0,2323	3
Organisational capacity	0,1074	4

Subsequently, AHP data collection was conducted using a pairwise comparison questionnaire obtained from seven experts comprising leaders and relevant working teams at the LLDIKTI Wilayah III, as well as academics familiar with the context of accreditation and higher education quality policies. The results of the questionnaire were then processed using Microsoft Excel software. The final results of the AHP will be presented in the form of priority weights and consistency ratios. They will serve as a reference for the formulation of measurable strategic policies. The results of the experts' calculations and weighting of the factor elements can be seen in Table 4.

Table 5 Actor Weight Assessment

Actor	Organisational Capacity	Improving Institutional Capability	Organisational Commitment and Readiness	Government Policy and Regulatory Support	Actor Weight
Quality Assurance	0,6417	0,6208	0,5307	0,6689	0,5986
Learning, Student Affairs, and Achievements	0,1947	0,2381	0,2780	0,1827	0,2363
Institutions and Partnerships	0,1636	0,1411	0,1913	0,1484	0,1651

Based on Table 5, it was also found that the actor with the highest overall weight was the quality assurance team, with a final weight of 0.5986, making it the most strategic actor in the ecosystem of institutional accreditation improvement at private higher education institutions. The role of the quality assurance team is evident from its significant contribution to all four criteria. The findings align with the National Accreditation Board for Higher Education Regulation Number 13 of 2023, which emphasises that in the accreditation process, the role of units or parties responsible for internal quality assurance functions is

Based on Table 5, commitment and organisational readiness rank highest with a weight of 0.3954, indicating that experts view these aspects as the most crucial foundation in improving accreditation (Radiana et al., 2024). This includes the seriousness of the organisation's leadership (Masci et al., 2025), structural readiness, and cultural readiness at the LLDIKTI as the supervisory body and at PTS as the implementer of higher education quality (Thomson et al., 2022). This finding aligns with what is emphasised in the 2024 Guidelines for the Implementation of the Internal Quality Assurance System, which states that the role of the organisation in fostering commitment and enhancing work ethic is one of the keys to the successful implementation of standards (Kementerian Pendidikan, 2024). Research by Javed & Alenezi (2023) further confirms that institutional readiness significantly mediates the relationship between quality assurance practices and accreditation outcomes, particularly in developing higher education systems.

vital (Perbanpt, 2023). These findings also align with the findings of Lee & Stensaker (2008) that, in the context of higher education, the emergence of new public management approaches has driven changes in perspectives on quality. Quality is no longer viewed solely as the responsibility of individuals or academic units but has become part of a more systemic institutional framework. This shift has opened the door to various formal structures, both at the national and institutional levels, specifically designed to manage, evaluate, and promote continuous quality improvement.

Table 4: Alternative Strategy Weight Assessment

Alternative Strategy	Quality Assurance	Institution and Partnerships	Learning, Student Affairs, and Achievements	Alternative Strategy Weight
Development of an Accreditation Assessment Simulation System Based on Typology and SPMI	0,2907	0,2843	0,2340	0,2762
Intensive Private University Accreditation Assistance	0,1682	0,1464	0,1794	0,1673
Facilitating the Digitalisation of	0,1576	0,1505	0,1764	0,1609

Alternative Strategy	Quality Assurance	Institution and Partnerships	Learning, Student Affairs, and Achievements	Alternative Strategy Weight
SPMI Understanding				
Expansion of the PTS Merger Initiative	0,1662	0,1226	0,1165	0,1472
Intervention Through Thematic Quality Audits at PTS	0,1124	0,1561	0,1485	0,1282
Synergy of Resources Between PTS Based on Typology	0,1049	0,1401	0,1452	0,1202

Based on Table 6, the strategy for developing a simulation system for accreditation assessment based on typology and SPMI ranks highest with a weight of 0.2762. This strategy is a priority because it can help private universities map their readiness before the field assessment and identify shortcomings in each criterion (Isaak et al., 2018). Not only as a testing tool, this system also serves as an early warning system (Prasetyo, 2022), shifting away from the old reactive approach that tends to emerge as the accreditation assessment day approaches (Harvey, 2004). By combining the typology approach and the SPMI cycle, this simulation is expected to provide an objective overview of the strengths and weaknesses of PTS, as well as project results regularly before the on-site visit takes place (Delgado-Florez et al., 2020). Such readiness assessment tools have been shown to significantly improve institutional preparedness and accreditation outcomes in various higher education contexts (Gemora, 2015).

CONCLUSION

This study delineates the accreditation readiness of private universities under LLDIKTI Wilayah III, categorising them into distinct zones: 168 institutions in the green zone, 50 in the yellow zone, and 34 in the red zone, with a further 10 requiring status clarification due to ongoing transitions. The central finding identifies organisational commitment and institutional readiness as the most critical determinants of accreditation success, with internal quality assurance units being the pivotal actors in this process. Consequently, the primary strategic contribution of this research is the proposal for a predictive accreditation simulation system. This tool, integrating institutional typology with the Internal Quality Assurance System (SPMI), is designed to function as a strategic quality gateway. It enables proactive readiness assessment, effectively bridging the gap between internal quality practices and external accreditation standards, thereby fostering a robust culture of continuous improvement.

Limitations and Suggestions for Future Research

This study is primarily focused on the facilitator's perspective (LLDIKTI). Consequently, a key limitation is its limited incorporation of the first-hand experiences and internal constraints faced directly by the PTS themselves. Future research should directly engage with a diverse sample of PTS and their organising bodies to investigate the internal determinants of accreditation success, such as the maturity level of SPMI implementation, data integrity challenges, and the tangible impact of internal policy support.

Furthermore, while this study proposes a conceptual framework for a predictive simulator, its practical efficacy remains theoretical. Future work should focus on the technical development and empirical validation of such a system through pilot implementations. Subsequent studies could then assess its actual impact on accreditation outcomes, user adoption rates, and its effectiveness as a learning tool integrated into the SPMI cycle, moving beyond its conceptualisation as a mere compliance instrument.

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