

Ethical Digital Leadership in Islamic Academia: Institutional Readiness and AI Integration for Soft Skills

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Abstract:

This study aims to analyze the perceptions of leaders at Private Islamic Religious Higher Education Institutions (PTKIS) regarding the integration of artificial intelligence (AI) into the development of students' soft skills. The study employs a mixed-methods approach with a sequential explanatory design. Quantitative data were collected via Likert-scale questionnaires involving 95 leaders from 17 PTKIS, while qualitative data were obtained through open-ended responses, observations, and in-depth interviews, followed by thematic analysis. The results indicate that the majority of PTKIS do not yet have written policies regarding AI usage, despite existing initiatives to integrate AI into the development of Semester Learning Plans (RPS), lecturer training, and the utilization of AI-based Learning Management Systems (LMS). Leaders' perceptions of AI tend to be positive, particularly regarding its role in fostering students' critical thinking, communication, collaboration, and leadership skills. However, concerns remain regarding academic ethics, a tendency toward instant learning, and institutional readiness. This study underscores the importance of strategic policies grounded in Islamic values, strengthened digital literacy, ethical digital leadership, and stakeholder collaboration to support the AI-driven transformation of Islamic higher education.

Keywords: *Artificial Intelligence, Soft Skills, Digital Leadership*

Abstrak:

Penelitian ini bertujuan menganalisis persepsi pimpinan Perguruan Tinggi Keagamaan Islam Swasta (PTKIS) terhadap integrasi kecerdasan buatan (AI) dalam pengembangan *soft skills* mahasiswa. Penelitian menggunakan pendekatan *mixed methods* dengan desain *sequential explanatory*. Data kuantitatif dikumpulkan melalui kuesioner berskala Likert yang melibatkan 95 pimpinan dari 17 PTKIS, sedangkan data kualitatif diperoleh melalui respons terbuka, observasi, dan wawancara mendalam, kemudian dianalisis secara tematik. Hasil penelitian menunjukkan bahwa sebagian besar PTKIS belum memiliki kebijakan tertulis terkait penggunaan AI, meskipun telah terdapat inisiatif integrasi AI dalam penyusunan Rencana Pembelajaran Semester (RPS), pelatihan dosen, dan pemanfaatan *Learning Management System* (LMS) berbasis AI. Persepsi pimpinan terhadap AI cenderung positif, khususnya dalam mendukung pengembangan kemampuan berpikir kritis, komunikasi, kolaborasi, dan kepemimpinan mahasiswa. Namun, masih terdapat kekhawatiran terkait etika akademik, kecenderungan belajar secara instan, dan kesiapan kelembagaan. Penelitian ini menegaskan pentingnya kebijakan strategis berbasis nilai-nilai Islam, penguatan literasi digital, kepemimpinan digital yang etis, serta kolaborasi

antarpemangku kepentingan dalam mendukung transformasi pendidikan tinggi Islam berbasis AI.

Kata Kunci: Kecerdasan Buatan, Soft Skills, Kepemimpinan Digital

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INTRODUCTION

Digital transformation in higher education has become inevitable, driven by rapid advancements in information and communication technology. In this context, Artificial Intelligence (AI) emerges as a key innovation that significantly reshapes how educational institutions design instruction, manage academic data, and foster student competencies. According to Russell et al. (2021), AI refers to systems capable of mimicking human abilities such as thinking, problem-solving, and adaptive learning. AI has been used to develop adaptive learning systems, provide automated feedback, and enhance personalised learning experiences (Choi et al., 2023). Beyond its technological role, AI also functions as a strategic tool for decision-making, campus administration, and real-time evaluation (Slimi et al., 2023; Alenezi et al., 2024).

This transformation is also occurring within Indonesia's Islamic Private Higher Education Institutions (PTKIS), which are adjusting to the demands of the digital age. The global trend of AI adoption in education is reflected in various national policies in developed countries. South Korea, for instance, has developed an AI Education Roadmap covering curricula from basic to higher education. In Finland, the government launched the "Elements of AI" program to promote AI literacy as a basic competency for all citizens, including the academic community (UNESCO, 2023). Complementing this, Rebelo (2025) highlights the need for curriculum designs that position AI not only as a tool but also as a framework for preparing adaptive graduates. In Indonesia, the Ministry of Education, Culture, Research, and Technology has promoted digital transformation through the Merdeka Belajar Campus program and the development of digital learning centres. However, no specific regulations currently exist regarding AI integration in PTKIS. Holmes et al. (2022) emphasize that AI adoption in education has wide-ranging implications for teacher roles, curriculum design, and personalised learning, all of which require a systemic approach to policy.

However, AI implementation in Islamic higher education must be aligned with ethical principles and Islamic values. AI's influence reaches the epistemological and axiological dimensions of Islamic education, demanding not only effectiveness but also moral responsibility. The use of AI for academic tasks, problem-solving, and text generation, if not accompanied by proper regulation and literacy, risks undermining scientific integrity. In Islam, honesty, justice, and authenticity are non-negotiable academic values (Rahman et al., 2023). Therefore, AI adoption within PTKIS must be carefully designed not only to adapt to technology but also to contextualize it within the values of maqasid syariah and wasathiyah (Pranata, 2024; Slimi et al., 2023).

One critical aspect of contemporary higher education is the development of students' soft skills, including critical thinking, effective communication,

collaboration, and leadership. (Alvarado-Bravo, M., García-Peñalvo, F. J., & Ramírez-Montoya, 2024) demonstrate that AI can serve as a strategic tool for enhancing soft skills such as digital empathy, leadership, and technology-based collaboration. AI can accelerate this development through interactive simulations, project-based digital learning, and platforms like ChatGPT, Gemini, or Midjourney used for prompt-based dialogue (Ofosu-Ampong, 2024). Obermeier et al. (2024) show that collaborative AI-based simulations improve participatory leadership and collective problem-solving. Meanwhile, Tang (2021) and Succi et al. (2020) argue that integrating soft skills into the curriculum must be supported by structured digital approaches to align with the needs of today's workforce.

Despite these developments, many PTKIS in Indonesia still face significant challenges. According to internal data from Kopertais Region XIII Jambi, only a few of the 17 affiliated PTKIS have adequate digital learning infrastructure, and none had formal AI policies (e.g., rector regulations or academic guidelines) as of 2024. This reflects a gap between global trends and local readiness. Other challenges include limited digital literacy among PTKIS leaders and faculty, resistance to changing institutional work culture, and the suboptimal role of quality assurance bodies in guiding digital transformation (Lily et al., 2022; Arinto, 2016).

In Islamic education management, institutional leaders act as strategic agents in shaping the direction of transformation policies. Their perceptions, understanding, and commitment greatly influence the success of technological adoption. Pranata (2024) found that value-based digital leadership strengthens academic innovation and policy effectiveness in PTKIS. Understanding PTKIS leaders' perspectives on AI is therefore not merely a technical issue, but a crucial step toward building a contextually relevant and value-driven roadmap for digital transformation (Creswell, 2014; Zawacki-Richter et al., 2019).

Despite this urgency, little research has specifically examined PTKIS leaders' perceptions of AI integration in soft skills development. Most literature focuses on students' or faculty perceptions or discusses only the technical aspects of AI in education. Moreover, no studies have connected leadership perceptions with institutional policy readiness or contextual digital strategies aligned with PTKIS culture. However, strategic decisions in PTKIS are strongly shaped by leaders' outlooks on innovation and associated risks.

Therefore, this study addresses a significant research gap by mapping how PTKIS leaders perceive AI's potential in shaping policy directions, influencing institutional management, and guiding soft skills development based on Islamic values. The study aims to: (1) identify the status of AI policy and implementation in PTKIS; (2) describe PTKIS leaders' perceptions of the benefits and risks of AI integration in soft skills development; and (3) formulate strategic recommendations based on empirical findings to strengthen AI-related policies in Islamic higher education institutions.

RESEARCH METHODS

This study employed a mixed-methods approach with a sequential explanatory design, beginning with the collection and analysis of quantitative data, followed by qualitative exploration to gain deeper insights. This design was

chosen to obtain a comprehensive understanding of PTKIS leaders' perceptions regarding the integration of Artificial Intelligence (AI) in the development of students' soft skills by combining the strengths of both numerical and narrative data (Creswell, 2014). Quantitative data were collected using a Likert-scale questionnaire distributed to 95 respondents, all of whom were institutional leaders from 17 PTKIS under the coordination of Kopertais Region XIII Jambi. The instrument consisted of 21 statements grouped into three main variables: (1) perceptions of AI, (2) support for AI integration in higher education, and (3) AI's contribution to soft skill development. The responses were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The quantitative data were analyzed using descriptive statistics, including frequency distribution, percentages, and mean scores. To enrich the results and provide narrative context, qualitative data were collected through open-ended questions embedded within the same questionnaire. These responses were analyzed thematically, following the stages of open coding, categorization, and identification of key themes relevant to the quantitative findings (Braun, V., & Clarke, 2006). The questionnaire items were developed based on a synthesis of current literature on AI in education and soft skill development (Ofosu-Ampong, 2024; Obermeier et al., 2024; Slimi et al., 2023). The indicators were aligned with validated instruments from previous studies, as reviewed by Alvarado-Bravo et al. (2024) and Pranata (2024). Content validity was confirmed through expert judgment by three scholars specialising in Islamic education management and educational technology. At the same time, reliability was tested using Cronbach's Alpha, which yielded values above 0.7 for all variables – indicating high reliability (Robles, 2012).

The research was conducted between January and March 2025. Data collection was carried out online using a Google Form distributed through official Kopertais XIII channels and leadership forums among PTKIS. This approach aligns with the characteristics of Islamic education management research, which emphasizes not only objective data collection but also contextual understanding of institutional values and reflective leadership processes. The procedural flow of this mixed-methods design is illustrated in Figure 1 below.

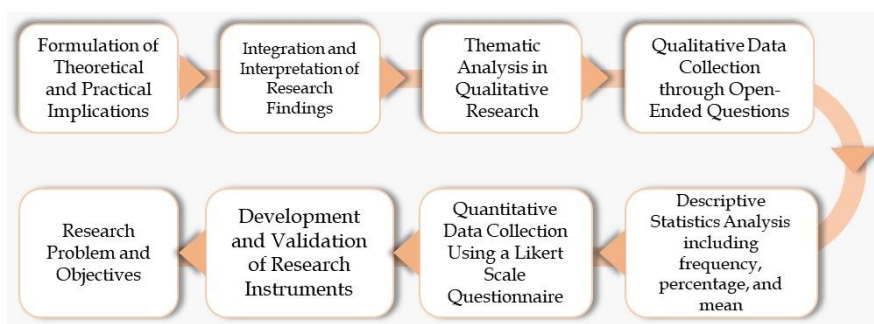


Figure 1. Flowchart of the Sequential Explanatory Mixed-Methods Design)

Studies by Chassignol et al. (2018) have demonstrated that AI can support the development of adaptive learning systems responsive to individual student needs. Johnson et al. (2020) emphasize that strengthening digital literacy is a prerequisite for the successful integration of AI into higher education ecosystems,

in line with the DigComp 2.1 framework issued by the European Union (Carretero et al., 2017). In the context of Islamic education, Rahman et al. (2023) and Pranata (2024) underscore that AI integration must be guided by Islamic ethical principles and supported by leadership that balances spiritual and digital awareness. The relevance of AI in soft skill development is further reinforced by Obermeier et al. (2024) and Ofosu-Ampong (2024), who highlight the benefits of project-based learning, digital simulations, and interactive AI-based platforms embedded in the curriculum. Nevertheless, Slimi et al. (2023) warn that without institutional policy support and infrastructure readiness, AI integration may exacerbate digital inequality. This concern is echoed by Nugroho & Yusuf (2022), who note that regulatory limitations, low digital literacy among leaders, and organizational cultures resistant to change often hinder technology adoption within PTKIS. Therefore, this research design aims to bridge the gap between theoretical frameworks and empirical realities, contributing to the formulation of digital transformation policies rooted in the perceptions of PTKIS leadership. This is consistent with the Islamic education management perspective, which views institutional leaders as key agents of change and custodians of values in institutional innovation processes.

RESULTS AND DISCUSSION

Results

The findings of this study are presented through two main approaches: quantitative analysis derived from Likert-scale questionnaire responses, and qualitative analysis developed from open-ended responses. The qualitative data were analyzed thematically and further enriched by observations and in-depth interviews with selected informants. The results are structured according to the research focus and the primary variables under investigation.

Existence of AI Policy in PTKIS

The survey of 95 PTKIS leaders revealed that most institutions had not yet formulated formal policies governing the use of Artificial Intelligence (AI). Only 8.42% of respondents indicated that their institutions had written policies, while 61.05% reported having none, and 22.11% stated that policy development was still in progress (see Table 1). These findings highlight the low level of institutional preparedness in addressing the challenges of digital technology, despite a general awareness of its importance. This aligns with observations that point to the lack of internal regulations as a key barrier to AI adoption in Islamic higher education institutions.

Table 1. AI Policy Status in PTKIS

Respondents' Answers	Frequency	Percentage (%)
Yes	8	8,42
No	58	61,05
In Progress	21	22,11
Not Yet and In Progress	8	8,42
Total	95	100

The status of AI policy within PTKIS indicates that over 60% of institutions do not yet have written policies. However, the need for regulation is becoming increasingly urgent as AI is integrated into academic processes. This condition is visually presented in Figure 1.

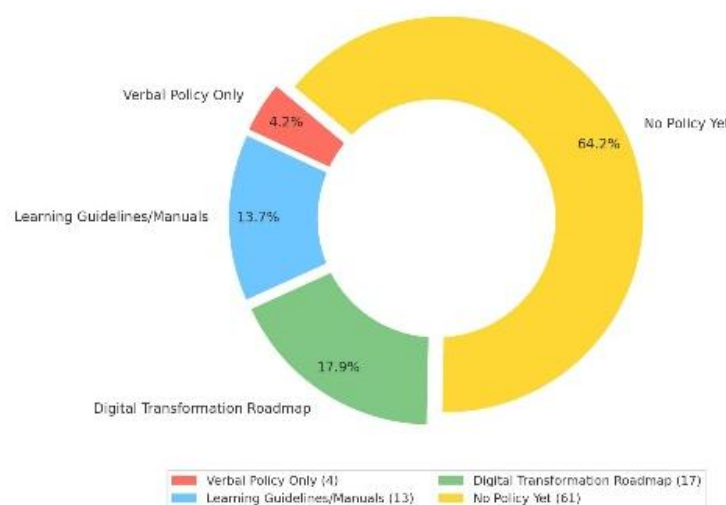


Figure 1. AI Policy Ownership Status in PTKIS

Practical Implementation of AI in Academic Activities

Despite the absence of formal policy frameworks, most institutional leaders reported that AI had begun to be applied in various academic functions, such as curriculum development (RPS), faculty training, and the use of AI-based Learning Management Systems (LMS). These early implementations reflect functional adaptation, even though they are not yet institutionally embedded. Existing AI-related initiatives varied, ranging from informal guidelines and digital transformation roadmaps to early-stage discussions (see Table 2). These findings suggest that AI integration is currently occurring through informal or operational channels, rather than through institutionalized policies (see Table 2).

Table 2. Existing Forms of AI Policy in PTKIS

Type of Policy	Frequency	Percentage (%)
Rector Regulation	0	0
Rector's Decree	0	0
Oral/Informal Policy Only	4	4,21
Instructional Guidelines	13	13,68
Digital Transformation Roadmap	17	17,89
Not Available	61	64,21
Total	95	100

Scope of Content of Existing AI Policies

Further analysis shows disparities in the scope of existing AI policies. Most policies focus exclusively on instructional use, with less attention given to soft skill development or ethical guidelines (see Table 3). The success of digital transformation in Islamic education depends not only on technical adoption but also on the ethical grounding of institutional policies. The limited scope indicates that PTKIS have yet to incorporate a holistic policy framework that includes value-

based governance, ethical use, and soft skill cultivation alongside technical guidance. The scope of AI-related policies in PTKIS within Kopertais Region XIII Jambi is illustrated in Table 3.

Table 3. Scope of AI Policies in PTKIS

Mentioned Scope	Frequency	Percentage (%)
Use of AI in teaching and learning	41	43,16
Development of students' soft skills	13	13,68
Guidelines for using AI tools (e.g., ChatGPT, DeepSeek, etc.)	4	4,21
Limitations or ethical use of AI on campus	21	22,11
All of the above aspects	8	8,42
Partial combination (2-3 items)	8	8,42
Total	95	100

Perceptions of Regulation and AI Ethics

Most respondents emphasized the importance of ethical regulations to prevent misuse, maintain academic integrity, and ensure that AI serves as a tool rather than a replacement for human intelligence. Concerns such as declining learning quality, plagiarism, and "academic instantism" emerged as dominant narratives in qualitative responses. Leaders largely supported the need for structured, principled policies to uphold educational values while embracing technological innovation.

Strategic Plans for AI Development in PTKIS

Many leaders expressed a commitment to formulating formal AI-related policies, including rector decrees, instructional guidelines, and digital literacy training programs. This signals a growing readiness to integrate AI in a more systematic and strategic manner. Thematic analysis of the qualitative data identified five core themes: the urgency of ethical regulation, concerns about academic instantism, awareness of AI's potential, ongoing policy development efforts, and roadmap-based institutional strategies. These themes reflect leadership engagement in proactive planning, though most institutions remain at the preliminary stage of transformation. Thematic analysis of the qualitative data identified five main themes as follows:

Table 4. Qualitative Findings: Key Themes and Respondent Quotes

Main Theme	Respondent Quote
Importance of AI regulation and ethics	"Regulations are essential to provide clear standards and prevent misuse." – R12
Concerns about academic instantism	"Students rely solely on AI without understanding the content." – R19
Leaders' awareness of AI potential	"AI is just a tool. Without human intelligence in crafting prompts..." – R28
Readiness to formulate AI policy	"We are drafting a Rector's Decree on the ethics and use of AI." – R10
Roadmap-based institutional strategies	"We plan to organize regular workshops and an institutional AI roadmap." ...– R05

Perceptions of AI in Strengthening Soft Skills

The quantitative analysis showed that the average scores for leaders' perceptions of AI were in the high category, indicating that AI is viewed as having strategic potential in enhancing students' soft skills—such as critical thinking, collaboration, communication, and leadership.

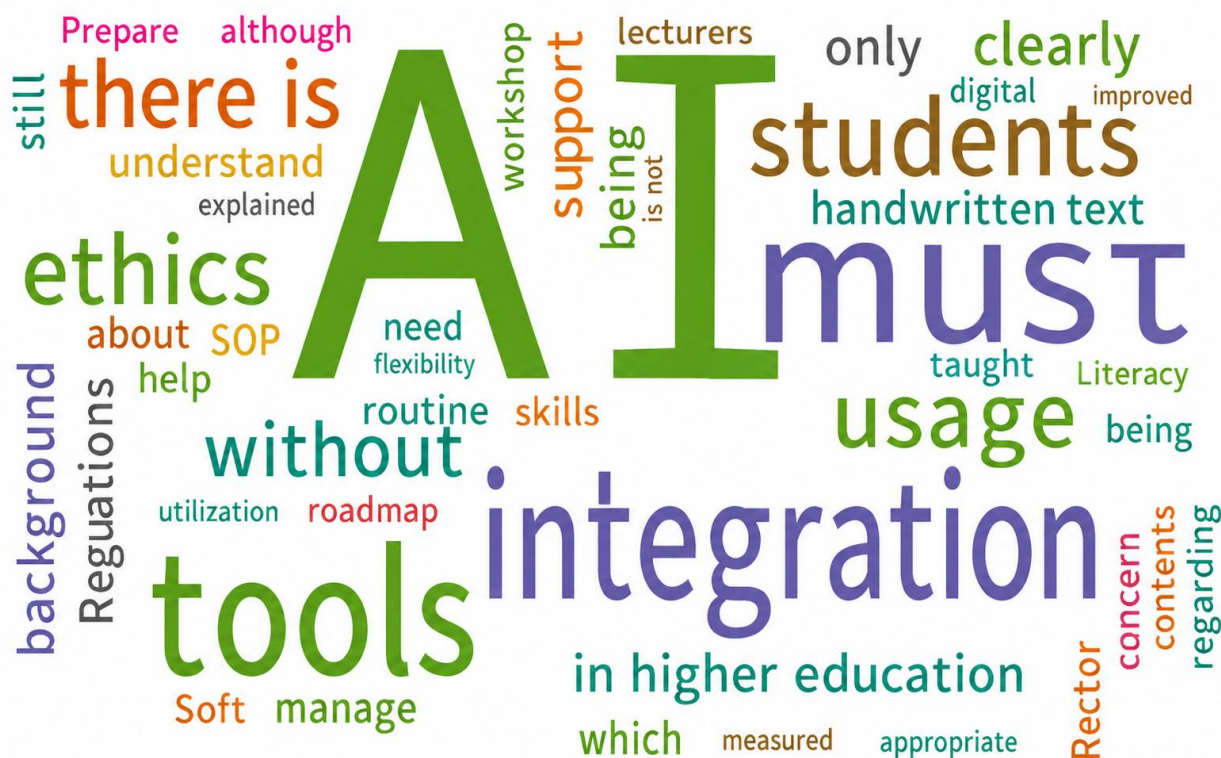


Figure 3: Visual Summary of Qualitative Findings on PTKIS Leaders' Perceptions of AI

Table 5. PTKIS Leaders' Perceptions of AI and Student Soft Skills

Key Variable	Mean Score
Leaders' Understanding and Attitudes toward AI	4,32
Support for AI Integration in Higher Education	4,17
Contribution of AI to Soft Skill Development	4,1

These findings are supported by studies that show that integrating AI into the curriculum can significantly enhance 21st-century competencies when combined with project-based learning strategies. In addition, (I)emphasize that AI developed in the context of higher education can act as a catalyst for soft skill development, particularly through simulations, collaborative learning environments, and reflective digital interaction. The consistency between quantitative scores and qualitative insights reflects the growing recognition among PTKIS leaders that AI, when guided by ethical and pedagogical frameworks, holds significant promise for transforming not only academic content delivery but also the holistic competencies needed for student success in the digital era.

Discussion

Existence of AI Policies in PTKIS

The survey of 95 PTKIS leaders indicates that institutional readiness for formal AI governance remains relatively limited. Only 8.42% of the institutions reported having written policies specifically addressing artificial intelligence (AI), whereas 61.05% had no formal policies and 22.11% were still drafting them. These findings suggest that the institutionalization of AI governance has not progressed at the same pace as the increasing use of AI in higher education. Although awareness of the importance of AI has grown, many PTKIS have not yet translated this awareness into formal regulatory frameworks.

This finding is consistent with previous studies identifying the absence of institutional regulations as a significant barrier to the systematic adoption of AI in higher education. AI governance requires more than the establishment of written regulations; it also depends on the capacity of academic communities to interpret, implement, monitor, and continuously adapt such policies to technological developments. Long and Magerko (2023), for example, identified a disconnect between formal institutional policies and the actual use of AI in classroom settings, suggesting that effective policies should incorporate mechanisms for continuous monitoring, evaluation, and revision. Similarly, Wang et al. (2024) emphasized the importance of involving students in the policy-development process, as participatory policy formulation can strengthen institutional ownership and encourage compliance with AI-use guidelines.

In addition, AI governance should not be developed as an isolated regulatory instrument. Chan (2023) argued that institutional AI policies should be aligned with complementary policies concerning digital competency, academic integrity, and ethical technology use. Such alignment is particularly important for PTKIS because technological transformation must be integrated with institutional educational values. Therefore, PTKIS should move beyond merely formulating AI regulations and establish participatory governance mechanisms through which faculty members, students, and institutional leaders can periodically assess the relevance, effectiveness, and ethical implications of AI policies.

Practical Implementation of AI in Academic Activities

Despite the limited availability of formal AI policies, the findings show that AI has already been incorporated into various academic activities within PTKIS. Respondents reported using AI in activities such as syllabus and lesson-plan development (RPS), faculty training, and AI-supported learning management systems (LMS). This pattern indicates that AI adoption at PTKIS is currently characterised by ***operational adaptation preceding formal institutionalisation***. In other words, academic communities have begun incorporating AI into teaching and learning practices even though comprehensive institutional governance frameworks are still under development.

This finding reflects a broader trend in higher education in which technological innovation often develops more rapidly than formal institutional policy. Roll et al. (2023) found that incorporating AI into interactive learning environments, including adaptive quizzes and intelligent-agent simulations, increased student motivation by up to 25% compared with conventional

instructional approaches. Likewise, Lee and Jung (2024) reported that AI assistants used to moderate online discussions could reduce participant dominance and facilitate more equitable collective engagement. González-Rico and Lluch Sintes (2024) further demonstrated that integrating AI-supported learning with personalised mentoring can provide more immediate and contextualised feedback, thereby improving the efficiency of soft-skill development.

However, the practical adoption of AI without adequate institutional guidance may also result in inconsistent practices among faculty members and academic programs. Therefore, operational experimentation should be accompanied by systematic capacity building. Xiong (2023) emphasized the importance of continuous technical and pedagogical training for faculty members to ensure that AI is used appropriately and effectively in higher education. For PTKIS, this implies that faculty development programs should address not only the technical operation of AI tools but also instructional design, assessment integrity, ethical considerations, and the pedagogical limitations of generative AI.

Scope of AI Policies in PTKIS

A deeper analysis of the findings reveals considerable variation in the scope of existing AI-related policies across PTKIS. Current policies tend to focus primarily on the immediate use of AI in teaching and learning, particularly in syllabus development (RPS) and instructional tools. By contrast, other important dimensions, including AI ethics, data literacy, soft-skill development, accountability, and institutional auditing, receive comparatively limited attention. This suggests that current AI governance within PTKIS remains fragmented and predominantly operational rather than comprehensive.

Such a limited policy scope may constrain institutions' ability to anticipate the broader academic, ethical, and organizational implications of AI adoption. McDonald et al. (2024) reported that only 38% of institutional AI policies globally incorporated regular auditing procedures, despite the importance of auditing for monitoring compliance, identifying unintended consequences, and mitigating institutional risks. Another critical dimension is data literacy, particularly the ability of students and academic staff to understand, interpret, evaluate, and appropriately use data within AI-supported environments. Van der Weide and Gjalt-Jorn (2023) highlighted data literacy as an important competency for responsible engagement with AI technologies.

Ethical considerations should also be translated into operational guidelines rather than remaining at the level of abstract principles. Chan (2023), for instance, recommended incorporating practical cases of ethical violations and their resolutions into institutional AI policies as educational resources for students and faculty members. Such an approach could help academic communities understand how ethical principles apply to actual situations involving plagiarism, authorship, privacy, algorithmic bias, and responsible AI use.

Accordingly, PTKIS need to expand the scope of their AI policies beyond regulations concerning classroom use. A comprehensive institutional AI governance framework should incorporate at least pedagogical use, academic integrity, ethical principles, data literacy, privacy and security, accountability

mechanisms, auditing procedures, faculty competency development, and student capacity building. Integrating these components would enable PTKIS to transition from fragmented AI practices toward a more systematic and sustainable governance model.

Views on AI Regulation and Ethics in PTKIS

The findings further demonstrate that PTKIS leaders generally recognize the importance of establishing ethical frameworks for AI use on campus. Respondents emphasized that AI should function as a supportive educational tool rather than as a substitute for human reasoning, academic responsibility, or intellectual engagement. Qualitative responses revealed several concerns, particularly the potential decline in learning quality, increased plagiarism, and the emergence of what respondents described as “academic instantism,” in which students rely excessively on AI-generated outputs without developing adequate conceptual understanding.

These concerns indicate that PTKIS leaders do not necessarily reject AI adoption; rather, they emphasize the need for responsible and value-oriented implementation. This distinction is important because effective AI governance should seek to maximise the educational benefits of AI while simultaneously minimising risks to academic integrity and the learning process. Within the context of Islamic higher education, ethical considerations are particularly significant because technology adoption is expected to remain consistent with institutional values, educational objectives, and principles of responsible knowledge production.

The literature provides several approaches that could inform such an ethical framework. Madnick (2023), through the “Ethical AI Lifecycle” model, proposed incorporating ethical checkpoints throughout different stages of AI implementation, from system design and deployment to monitoring and post-deployment evaluation. Similarly, Umbrello and van de Poel (2024) emphasized transparency in AI development and implementation, including documentation concerning training datasets and preprocessing procedures. At the educational level, UNESCO (2021) recommended integrating AI ethics literacy into curricula to strengthen learners' understanding of the individual and societal consequences of AI technologies.

For PTKIS, these perspectives suggest that AI ethics should not be positioned merely as a supplementary statement within institutional regulations. Instead, ethical principles should constitute a core component of AI governance and should be operationalised through academic guidelines, curriculum content, assessment procedures, digital literacy programs, and institutional monitoring. Such an approach would allow PTKIS to develop AI governance that is technologically responsive while remaining aligned with academic integrity and institutional values.

Strategic Planning for AI Development in PTKIS

Although formal AI governance remains limited, the findings indicate a growing institutional commitment toward more systematic AI development. Most PTKIS leaders expressed an intention to formulate formal AI-related policies

through instruments such as rector's decrees, instructional guidelines, and digital literacy programs. These initiatives suggest a transition from spontaneous or individually driven AI adoption toward more structured institutional planning.

The qualitative findings further identified ethical regulation and roadmap-based development as central themes in institutional AI planning. This indicates that PTKIS leaders recognize the need for AI development to be supported by clear stages, institutional responsibilities, competency development, and measurable outcomes. However, institutional roadmaps should remain sufficiently flexible to accommodate the rapid evolution of AI technologies. Raj (2024), for example, reported that universities implementing the Scaled Agile Framework (SAFe) in AI-related projects were able to reduce implementation time by approximately 30%. Although the applicability of such an approach may vary according to institutional context, the underlying principle of iterative planning may be relevant to PTKIS because AI technologies and associated regulatory challenges continue to evolve rapidly.

Strategic planning should also be linked to institutional competency development. Brown and Adams (2023) emphasized the need for competency roadmaps that identify both technical and nontechnical skills required at different stages of AI adoption. Such competency mapping is particularly relevant for PTKIS because successful AI implementation depends not only on technological infrastructure but also on faculty members' pedagogical competence, students' digital literacy, and administrators' capacity for AI governance.

Moreover, institutional progress should be evaluated using measurable indicators. Jin et al. (2024) recommended establishing specific key performance indicators (KPIs), such as the proportion of faculty members who meaningfully integrate AI into their syllabi and instructional practices. For PTKIS, relevant indicators may include the proportion of programs with AI-related guidelines, faculty participation in AI literacy training, student competency in responsible AI use, reported cases of AI-related academic misconduct, and periodic evaluations of AI-supported learning activities. Through iterative planning, competency mapping, and measurable performance indicators, PTKIS can develop AI strategies that are both adaptive and accountable.

Perceptions of AI in Enhancing Students' Soft Skills

The quantitative findings show that PTKIS leaders generally hold positive perceptions of AI's potential contribution to students' soft-skill development. Respondents perceived AI as capable of supporting critical thinking, communication, collaboration, and leadership when integrated into appropriate learning activities. These findings suggest that institutional leaders view AI not merely as a technological tool for automating academic tasks but also as a potential pedagogical instrument for strengthening 21st-century competencies.

Nevertheless, the contribution of AI to soft-skill development is likely to depend substantially on instructional design. Simply providing students with access to AI tools does not automatically promote critical thinking or collaboration. AI-supported learning needs to involve activities that require students to question outputs, evaluate evidence, engage in reflection, solve problems collaboratively,

and make independent judgments. Thus, the pedagogical value of AI lies less in the technology itself than in the way AI is incorporated into structured learning experiences.

Previous research supports this interpretation. Heerink et al. (2023) found that AI agents designed to simulate interpersonal dialogue increased student empathy by 22%, illustrating the potential of interactive AI environments to support socio-emotional learning. Schoenberger et al. (2024) similarly reported that gamification elements in AI-supported platforms, including badges and leaderboards, could increase active participation and strengthen teamwork and leadership. In addition, González-Rico and Lluçh Sintes (2024) emphasized that combining AI-assisted learning with personalised mentoring can create more contextualised learning experiences.

Xiong (2023) recommended combining AI-based interventions with simulation, gamification, and mentoring to facilitate more comprehensive soft-skill development. These findings reinforce the view that AI should not replace interpersonal interaction or reflective learning processes. Instead, AI should function as a pedagogical scaffold that expands opportunities for simulation, feedback, problem-solving, and collaboration. Consequently, PTKIS should ensure that AI-supported learning activities are intentionally designed to encourage critical reflection, communication, collaboration, creativity, and leadership rather than merely increasing the efficiency of task completion.

CONCLUSION

This study concludes that although most Islamic Private Higher Education Institutions (PTKIS) in Jambi Province have not yet established formal policies governing the use of artificial intelligence (AI), its practical application has begun in various academic activities, revealing a clear gap between institutional awareness and regulatory preparedness. PTKIS leaders generally perceive AI as a strategic tool for enhancing students' soft skills, particularly critical thinking, communication, collaboration, and leadership; however, concerns regarding ethical misuse, academic originality, and learning instantism underscore the need for comprehensive, value-based governance. The study contributes to Islamic education management by emphasizing the strategic role of institutional leadership in ensuring that digital transformation is implemented ethically, contextually, and in accordance with Islamic values and academic responsibility. Accordingly, PTKIS should prioritise developing institutional AI regulations, strengthening digital literacy among leaders and faculty members, establishing integrated AI transformation roadmaps, optimising the roles of quality assurance and research units, and promoting interinstitutional collaboration to share policies, practices, and technological resources. Future research should extend the analysis to broader geographical and institutional contexts and employ inferential approaches to examine the relationships among leadership perceptions, institutional policies, and the quality of AI-supported learning in Islamic higher education.

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