

Between Benefits and Concerns: The Use of Artificial Intelligence to Support the Creativity of Prospective Islamic Education Teachers from the Perspective of the Technology Acceptance Model

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Article Info

Article history:

Submitted Nov 14, 2025

Accepted Mei 22, 2026

Published Mei 31, 2026

Keywords:

artificial intelligence,
creativity, technology
acceptance model,
prospective Islamic
education teachers

ABSTRACT

This study aims to analyze the pattern of use of Artificial Intelligence (AI) in supporting the creativity of prospective Islamic Religious Education (PAI) teachers, especially in the perspective of benefits and concerns that arise through the lens of Technology Acceptance Model (TAM). Using a qualitative approach with a narrative inquiry design, this study involved 10 students and 3 lecturers in the Islamic Religious Education study program of FITK UIN Walisongo Semarang. Data was collected through in-depth interviews and analyzed thematically, with validation through triangulation and member checking. The findings show that AI utilization patterns are closely related to two main constructs of TAM: Perceived Usefulness and Perceived Ease of Use. In the Perceived Usefulness dimension, students use AI to create locally nuanced educational narratives, design innovative learning media (such as interactive infographics and religious podcasts), and develop contemporary analogies to explain religious concepts, all of which reflect original and contextual creative expression. Meanwhile, Perceived Ease of Use allows students to iterate ideas quickly, explore hybrid formats (e.g. integration of Qur'anic verses with AI visuals), and adapt religious content into popular culture such as educational TikTok scripts. However, the study also revealed concerns: some students stated that reliance on AI has the potential to erode originality, shorten the process of creative reflection, and reproduce cultural stereotypes. Thus, this study confirms that the acceptance of AI in the context of PAI creativity is ambivalent, it is a driver of creativity when used critically, but risks inhibiting it when adopted passively.

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1. INTRODUCTION

The potential of Artificial Intelligence (AI) in the world of Indonesian education, especially Islamic Religious Education (PAI), is increasingly promising along with the rapid development of digital technology. Data from the Ministry of Religious Affairs of the Republic of Indonesia (2023) notes that the number of Islamic educational institutions in Indonesia –ranging from RA/TK to universities– has reached more than 180,000 units, with an average annual growth of around 3.2% since 2019. The penetration of AI in education services in Indonesia has grown by nearly 40% per year in the last five years, according to the APJII report (2024). This parallel of growth creates

opportunities for integration between Islamic values and the digital ecosystem, giving rise to an Islamic education model that is responsive to the demands of the 21st century (Maulidi, 2025). AI can assist prospective PAI teachers in designing creative learning, analyzing religious texts contextually, and improving collaboration and pedagogical communication. However, if the use of AI is not based on critical digital literacy, epistemological awareness, and sharia-based ethics, then this technology can actually backfire (Baharuddin et al., 2025). These risks include over-reliance on machines that can erode the ability to think independently, the dissemination of unverified religious information, and the potential for value distortion due to algorithmic bias (Nurhayati et al., 2024). Without assistance and internal regulations based on Islamic values, AI risks shaking the foundation of character education that is the spirit of Islamic Religious Education (Agustin, 2025).

A number of studies have explored the linkages between AI and Islamic education, but have not touched on the complexity of utilization patterns that link the creativity of prospective teachers to ethical and epistemological concerns. First, Sodik's (2024) research examined the acceptance of AI in Islamic education, finding that despite the potential, there has been no concrete measurement of its impact on creativity. Second, the study (Haristiani, 2019) highlights the use of chatbots as a technically effective learning medium, but also shows a lack of pedagogical reflection in its application (Haristiani, 2019). Third, research by Hasanah and Budiyo (2024) at UIN Malang found that 65% of PAI students have access to AI, but only 22% are able to evaluate the validity of AI-generated content, illustrating the gap in understanding in the context of Islamic education. Fourth, the study by Klímová et al. (2023) emphasizes the urgency of prioritizing AI ethics in education, but has not been empirically tested in the Indonesian context, illustrating the need for a deeper study of ethical values in the application of AI. Fifth, the research of Hakim and Angraini (2023) uses the Technology Acceptance Model (TAM) to predict AI adoption, but focuses on administrative efficiency, not on aspects of academic and pedagogical creativity. Of the five studies, there is a gap: there has been no research that has holistically examined the patterns of AI use in supporting the creativity of prospective PAI teachers while considering epistemological, ethical, and pedagogical concerns. This shows the urgency of research that integrates functional benefits with the principle of caution based on Islamic values.

Based on the research gap, this study aims to analyze the potential benefits and concerns in the pattern of Artificial Intelligence Utilization to Support the Creativity of Islamic Religious Education Teacher Candidates through the lens of the *Technology Acceptance Model* (TAM) which is expanded with the dimensions of ethics, epistemology, and pedagogical creativity. The significance of this research lies in its efforts to integrate technological perspectives, pedagogy, and Islamic values in understanding how prospective PAI teachers use AI critically and creatively. The focus on PAI students is very important because they are potential agents of educational transformation that will shape future generations of Muslims; therefore, their AI utilization patterns must be balanced between innovation and value integrity. This research was conducted at UIN Walisongo Semarang because this institution represents the typical dynamics of Islamic education in Indonesia: it has a strong commitment to the integration of Islamic sciences and science, but faces the challenges of digital infrastructure disparity and AI literacy compared to institutions such as UII. Through a qualitative approach based on *narrative inquiry* and validation through triangulation and *member checking*, this study not only describes the practice of using AI, but also reveals the tension between technological enthusiasm and normative prudence. The results are expected to be the basis for the development of AI literacy modules based on Islamic values and education policies that combine technological advances with moral responsibility for education.

2. METHOD

This study aims to analyze the potential benefits and concerns in the pattern of using Artificial Intelligence (AI) to support the creativity of prospective Islamic Religious Education (PAI) teachers, through the lens of the Technology Acceptance Model (TAM) which is expanded with the dimensions of ethics, epistemology, and pedagogical creativity. Using a qualitative approach with a narrative inquiry design, this study explores the experiences and subjective meanings of informants related to the use of AI in the learning process, learning media design, and exploration of innovative ideas in the context of religious education. Data was collected through in-

depth interviews with 10 students and 3 active lecturers using AI from the PAI Undergraduate Study Program at UIN Walisongo Semarang. Interviews with students lasted a total of 180 minutes (in some sessions), while interviews with lecturers lasted 20 minutes each. All interview sessions were conducted in Indonesian, recorded with the permission of participants using smartphones, and then transcribed in their entirety for thematic analysis. All participants provided written informed consent, including consent to the use of data for scientific publications (Egin, 2025). This narrative approach allows research to capture the complex dynamics between the acceptance of technology, Islamic values, and the need for responsible creativity in the formation of the professional identity of prospective PAI teachers (Belda-Medina & Goddard, 2024). Previous research has also shown that the implementation of AI can improve teaching and learning skills, as well as provide insights for the development of creativity in the broader educational context (Baturay et al., 2017). Therefore, this research is expected to contribute to understanding the role of AI as a tool to enrich the learning process and professional development of teachers in the field of religious education (Zawacki-Richter et al., 2019).

Table 1: Informant Profiles

No.	Initials	Study Programs	University Origin	Role
1	DU1	Islamic Religious Education	UIN Walisongo Semarang	Lecturer
2	DU2	Islamic Religious Education	UIN Walisongo Semarang	Lecturer
3	DU3	Islamic Religious Education	UIN Walisongo Semarang	Lecturer
4	MU1	Islamic Religious Education	UIN Walisongo Semarang	Students
5	MU2	Islamic Religious Education	UIN Walisongo Semarang	Students
6	MU3	Islamic Religious Education	UIN Walisongo Semarang	Students
7	MU4	Islamic Religious Education	UIN Walisongo Semarang	Students
8	MU5	Islamic Religious Education	UIN Walisongo Semarang	Students
9	MU6	Islamic Religious Education	UIN Walisongo Semarang	Students
10	MU7	Islamic Religious Education	UIN Walisongo Semarang	Students
11	MU8	Islamic Religious Education	UIN Walisongo Semarang	Students
12	MU9	Islamic Religious Education	UIN Walisongo Semarang	Students
13	MU10	Islamic Religious Education	UIN Walisongo Semarang	Students

To ensure the validity and credibility of the findings, the study applied data validation through source triangulation and member checking. Source triangulation is carried out by comparing the perspectives of students and lecturers on how AI influences—both encouraging and inhibiting—their pedagogical creativity within the framework of Islamic ethics and epistemology (Rahmawati, 2025; Thoriquttyas & Rohmawati, 2024). Member checking is carried out by returning transcripts and initial interpretations to a selected number of informants to verify the accuracy of the meaning and context of their statements, thereby reducing the risk of interpretive bias (Djamdjuri et al., 2023). The data analysis follows Miles and Huberman's interactive model, which consists of three stages: (1) data reduction—through coding based on the theme of creativity, technology acceptance, ethical considerations, and epistemological awareness (Zawacki-Richter et al., 2019); (2) data display—by compiling thematic matrices and comparative narratives across informants; and (3) conclusion drawing/verification—through repeated reflection on patterns, tensions, and deep insights that arise from the interaction between TAM and Islamic values (Zawacki-Richter et al., 2019). The analysis process is carried out iteratively during and after data collection, allowing researchers to delve into contextual nuances and produce relevant, in-depth findings, and contribute to the development of AI pedagogy in moral and critical Islamic religious education (Velly et al., 2025).

3. RESULTS

The findings of this study show that the use of *Artificial Intelligence* (AI) by prospective Islamic Religious Education teachers at UIN Walisongo Semarang opens up significant creative space as well as raises reflective concerns, as revealed through the lens of the *Technology Acceptance Model* (TAM). On the one hand, *Perceived Usefulness* AI is manifested in its ability to help students produce educational narratives based on Walisongo values, design interactive learning media such as infographics and animated storyboards, and develop contemporary analogies—such as

interpreting zakat as a social financial system or hijrah as a digital transformation—that make Islamic teachings relevant to the younger generation. On the other hand, *Perceived Ease of Use* creates an inclusive "imaginative playspace", allowing students from non-technical backgrounds to freely experiment with creative formats such as Javanese religious poems, digital comics, or educational TikTok content, without being hampered by the limitations of technical skills. Behind this immense potential, however, some students expressed concern that reliance on standardized AI responses risked eroding the originality of thinking, shortening the process of spiritual reflection, and replacing the profound struggle of meaning—which should be at the core of religious creativity—with an instantaneous solution that was ethically and culturally flat. Thus, AI functions optimally not as a substitute for the creative process, but as a dialogical partner in an educational ecosystem that is humanistic, values-based, and guarded by ethical guidance and strong critical literacy.

3.1 Aspects of Perceived Usefulness: AI as a Dialogical Partner in Creative Expression

The findings of the study show that the use of artificial intelligence (AI) by Islamic Religious Education (PAI) students at UIN Walisongo Semarang has significant implications in encouraging increased academic and pedagogical creativity, especially when analyzed through the *Technology Acceptance Model* (TAM) framework. The perceived *usefulness* of AI forms an active and reflective pattern of interaction, where students not only access information, but also explore, reconfigure, and express religious ideas in new ways that are original, contextual, and rooted in Walisongo values. In the students' view, AI is not just a technical tool, but a dialogical partner that allows them to translate Islamic teachings into relevant forms of expression for the younger generation. AI serves as a creative catalyst: it accelerates access to information, opens up the space of imagination, and facilitates narrative experimentation that is responsive to contemporary socio-cultural challenges. This process takes place in a humanist ecosystem, where Islamic values—such as moderation, noble morals, and local wisdom—are the main foundations. Students are not passively accepting AI output; they actively filter, criticize, and adapt it to the context of the pesantren, Javanese culture, and the principles of Ahlussunnah wal Jama'ah. Thus, the perception of the benefits of AI is not only measured by efficiency, but also by its ability to help realize a contextual, in-depth, and community-oriented da'wah vision. In this context, TAM proves to be relevant because *Perceived Usefulness* is the main foundation for sustainable and pedagogically meaningful technology acceptance.

PAI students at UIN Walisongo view AI as a very useful technology because it is able to support creative expression in three main patterns. First, they use AI as an educational narrative builder tailored to a child or adolescent audience, often integrating Walisongo characters and local values. For example, a student asked AI to compile a short story about Sunan Muria that was packaged in a podcast format for students. "I use AI to make a podcast version of Sunan Muria's story that can be heard by students," said MUN1. Second, AI is used as a design assistant for interactive learning media, such as infographics, animated storyboards, or visual content that conveys the concept of monotheism, religious moderation, or morals in an interesting way. "I can design learning media based on Walisongo's wisdom with the help of AI," explained MUN3. Third, students use AI to formulate contemporary analogies that bridge religious teachings with contemporary realities—for example, comparing zakat with a social financial system or tawakkal with stress management. "AI helped me make an analogy between the concept of tawakkal and student stress management," added MUN5. These patterns suggest that the perception of AI benefits is expressive, not just instrumental. Students are not only looking for efficiency, but space to translate abstract Islamic values into concrete forms that are easy to understand, touch emotions, and relevant to the daily lives of the younger generation. In this process, AI becomes a medium to update da'wah methods without leaving the roots of pesantren traditions.

The three patterns of AI utilization reflect a holistic and value-based approach. Students do not just produce content, but actively engage in the process of ethical, cultural, and pedagogical reflection. They realize that creativity in Islamic religious education must be born from the struggle between sacred texts, local contexts, and social needs. For example, when producing content about religious moderation, students not only use statistical data, but also insert stories of tolerance of Wali Songo or the value of Javanese gotong royong. "AI makes it easier for me to create religious moderation content for Islamic boarding school children," said MUN8. This approach shows that

the benefits of AI are not measured by the output, but by how the output is enriched with personal touches and local wisdom. In fact, in the process of compiling narratives, students often ask AI to produce several versions, then choose the one that best suits their religious vision. "I ask a question to AI: how to explain zakat for urban youth? The result is a good idea for TikTok content," said MUN6. Thus, *Perceived Usefulness* is not only related to AI's ability to generate ideas, but also to its flexibility in being a medium of dialogue between Islamic values and the reality of generation Z. This strengthens AI's role as a humanistic and sustainable means of innovation in religious education.

PAI lecturers at UIN Walisongo observed a significant transformation in the way students design religious learning. They noted increased originality, experimental boldness, and depth of reflection in the AI-assisted students' works. "I see that students are now more courageous in presenting unique and contextual da'wah content," said DUN1. The most striking thing is how students are able to combine Islamic values with local wisdom and contemporary social issues creatively. For example, students use AI to adapt the story of Sunan Kalijaga into a short drama script that raises the theme of tolerance between religions, or draw an analogy between the concept of trust and work ethics in the digital world. "AI helps them translate abstract values into concrete, easy-to-digest forms," DUN3 added. The lecturers emphasized that AI does not replace the role of teachers, but expands the possibilities of pedagogical expression. They also see that students become more motivated to enrich their content with local references, Walisongo history, or Indonesian values such as *Bhinneka Tunggal Ika*. "I am happy to see that they use the character of Walisongo in AI-assisted digital stories," explained DUN1. In the view of lecturers, AI functions optimally when used as a means of dialogue between the scientific tradition of Islamic boarding schools and the needs of the younger generation. They emphasized the importance of ethical and pedagogical guidance so that the use of AI remains in a humanist and value-based corridor, not just technical efficiency.

The interpretation approach developed by students has also become more responsive to current reality. They not only memorize or convey religious teachings textually, but also reinterpret Islamic concepts through the lens of modern life. For example, zakat is explained as a social financial system that is relevant for urban youth, hijrah as a digital transformation in careers, or amanah as integrity in startup work. "I made an analogy between migration and mindset change in career through AI," explained MUN2. AI plays a facilitator in the process of preparing analogies and narratives that touch on the reality of daily life. This approach reinforces the humanist dimension in religious education, where Islamic values are presented as real solutions, not just dogmas. Students do not passively accept the output of AI, but actively reflect, criticize, and adapt it to suit religious visions and local contexts. "AI helped me craft contextual interpretations of social justice for younger generations," MUN7 added. This process shows that AI does not replace the critical thinking process, but rather enriches the space for creative and contextual interpretation exploration. The lecturer also appreciated how students were able to use AI to design an interpretation approach that was not patronizing, but invited dialogue and reflection. "They are no longer stuck in the classic format, but create new relevant media," said DUN3. In this context, AI is becoming a tool to update the face of Islamic religious education without losing its spiritual and moral essence.

The AI-driven creative process also deepens students' understanding of inclusive Islamic values and *rahmatan lil 'alamin*. In designing anti-radicalism content or tolerance campaigns, students not only rely on data, but also universal Islamic values. For example, they use AI to compile TikTok scripts about the importance of *Bhinneka Tunggal Ika* in Islam, or create infographics about Walisongo's history of tolerance. "I use AI to make a TikTok script about the importance of *Bhinneka Tunggal Ika* in Islam," said MUN6. "AI helps me draw an analogy between mutual cooperation and the concept of *ukhuwah*," added MUN1. In this process, students not only produce content, but also deepen their own understanding of Islamic values that unite, not divide. AI helps them craft narratives that are not patronizing, but invite dialogue and reflection. In fact, when explaining the concept of justice, they used the metaphor of a diverse flower garden or a digital community that supports each other. "AI helped me explain religious moderation through the metaphor of a garden of flowers," said MUN10. Thus, AI is a medium to actualize Islamic

values in a challenging digital public space. This approach shows that creativity in Islamic religious education is not only a matter of aesthetics, but also of social and moral responsibility. Students are aware of their role as agents of change who must be able to answer the challenges of the times in a wise, creative, and value-based way.

The findings of the study show that the contribution of AI to the creativity of Islamic Religious Education students is not only seen in the improvement of academic efficiency, but also in their ability to integrate Walisongo values into the resulting learning products. This is reflected in students' experiences when utilizing AI to develop learning materials, da'wah media, and educational content that are relevant to the local cultural context. MU1 explained that AI is often used as a means of exploring ideas before the material is further developed independently. He stated, *"Usually I ask AI to make examples of moral learning materials with a Javanese cultural approach or Sunan Kalijaga's da'wah method. From there I got the initial idea, but I still revised and adjusted it to the Islamic sources I learned on campus."* A similar experience was conveyed by MU2 who used AI to design digital learning media. According to him, *"AI helped me find new ways to explain religious material to students. I have asked for examples of learning that associate the value of mutual cooperation with Islamic teachings, then I developed it again to be more in accordance with the conditions of the surrounding community."* Meanwhile, MU3 emphasizes that creativity is not born solely from technology, but from the process of user reflection on the results provided by AI. He stated, *"The output from AI is not directly used by me. I usually compare with book references, the results of lecturer discussions, and experiences at Islamic boarding schools. It is precisely from the process of choosing and improving that more creative ideas emerge."* The data shows that AI functions as a spark of creativity, while Walisongo's values remain a normative framework that guides the process of selection, interpretation, and development of students' ideas in contemporary Islamic learning.

However, behind the optimism of the majority, a small percentage of informants expressed concern that reliance on AI is actually eroding the originality of thinking. They feel that the overly standardized structure of AI responses makes students lose the courage to take intellectual risks or develop personal styles of expression. In their daily lives, students tend to imitate the narrative patterns, diction, or formats generated by AI because they are considered "safe" and "accepted", so that the creative process becomes just a modification of the surface, not the result of a deep struggle of meaning. "I'm worried about losing my personal voice in writing religious content," said MUN9. "AI is fast, but sometimes the results feel spiritually flat," explained MUN2. Some students reveal that the ease of access to ready-made ideas actually shortens the process of creative reflection—they no longer go through the phases of inner struggle, search for deep meaning, or failed experiments that are the forerunners of authentic innovation in religious education. "True creativity requires struggle, but AI makes everything feel too smooth," said MUN6. In the view of this small group, AI is not a creative partner, but rather a substitute for the creative process itself—a tool that simplifies, but at the same time superficializes the depth of religious expression that should be born out of personal, spiritual, and cultural struggles that cannot be automated. However, the majority still believe that with ethical guidance and critical reflection, AI can remain a partner in value-based innovation. "AI is like a pen—it depends on who is holding it and for what," said DUN1.

3.2 Perceived Ease of Use: AI as an Inclusive and Humanist Imaginative Playspace

The ease of use of AI (*Perceived Ease of Use*) according to an informant from UIN Walisongo is a determining factor in unlocking students' imaginative potential. The responsive interface, simple instructions, and quick access allow them to conduct repetitive experiments without getting bogged down in technical hurdles. This process creates a kind of "imaginative playroom" where students can try out a variety of formats—from religious poetry to educational TikTok scripts—to find the most authentic expression that fits their da'wah vision. "I asked AI to make religious poems, then I changed the diction to make it more personal," said MUN3. Interestingly, active engagement with AI does not stop at the passive acceptance of output, but rather involves the process of criticizing, editing, and adding a thick personal touch. Students often ask for variations over and over again until they find a form of expression that most resonates with their spiritual identity. "I tried various prompts until I found a delivery style that suits my da'wah vision," explained MUN8. In this context, ease of use is actually a driver for the exploration of popular culture. Students feel more confident because they don't need to master technical skills such as

graphic design or video editing to produce quality content. "Because AI is easy to use, I can focus directly on the moral message, not the technicality," MUN5 said. Thus, *Perceived Ease of Use* not only reduces the technical burden, but creates a safe environment for experimentation, failure, and learning—an essential process in the development of creativity. This shows that ease of use is not just about the interface, but about how technology opens up space for humanistic, contextual, and value-based expression.

Interestingly, this convenience does not make students passive; instead, they actively edit, criticize, and add local touches such as regional languages, mutual cooperation values, or Wali Songo's stories. Students often iterate ideas quickly, for example when designing tolerance campaigns or digital da'wah content. "I often iterate on the idea of a tolerance campaign through AI until I find the most powerful," MUN5 added. This process allows them to explore a variety of possibilities without fear of failing or running out of time. "I feel freer to explore ideas because AI gives me a lot of early options," MUN2 says. In the context of pedagogical innovation, the ease of use of AI is actually a driver of popular culture exploration, such as adapting the story of the Prophet's companions into comic characters or designing da'wah content based on digital platforms. "AI helped me experiment with hybrid formats, such as combining Qur'anic verses and digital visuals," said MUN1. "I can immediately execute ideas without having to learn graphic design first," explained MUN4. Thus, AI not only reduces the technical burden, but also becomes a catalyst for humanistic, contextual, and value-based creativity. Students feel more confident and encouraged to create pedagogical innovations rooted in tradition. "I feel more confident in creating new learning media," said MUN6. "With AI, I can present Islamic teachings in contemporary language," said MUN9. In this perspective, ease of use is not the end of the process, but rather the beginning of deeper creative exploration.

This convenience also encourages the exploration of hybrid formats that were previously difficult for students without technical backgrounds to access. For example, combining Qur'anic verses with *AI-generated* visuals to create digital da'wah posters, or integrating hadith with modern graphic design elements through simple commands. "With a simple command, I can produce an animated storyboard about morals," MUN8 added. This process goes smoothly because students are not burdened by technical complexity; They focus on aesthetic experimentation, narrative, and social relevance. In fact, students are able to produce content in Javanese or insert local sayings to strengthen their connection with the pesantren audience. "I use AI to compose religious poems in smooth Javanese," said MUN6. In this context, AI serves as a bridge between tradition and modernity—allowing old values to be conveyed through new mediums without losing their essence. Students not only produce content, but also deepen communication, collaboration, and adaptation skills—the four pillars of 21st century skills that are crucial for aspiring PAI teachers. Ease of use also encourages collaboration between students, for example in designing joint projects such as religious podcasts or digital campaigns. Thus, AI not only speeds up production, but also enriches collaborative and reflective learning processes. This shows that *Perceived Ease of Use* is not only about individual efficiency, but also social and pedagogical inclusivity in the pesantren-based academic environment.

Students from non-design or non-literary backgrounds are now able to produce competitive and relevant works. "I am from the TKJ department, but now I can create digital da'wah content thanks to AI," said MUN9. "I'm not good at design, but AI helped me make posters containing hadiths about tolerance," explained MUN2. "AI makes me dare to experiment even though I don't have a literary background," said MUN4. In this context, AI serves as a driver of creative inclusivity, where every student—regardless of their academic or socio-economic background—has an equal opportunity to contribute to updating the face of Islamic religious education in the digital age. This is especially important in the context of UIN Walisongo, where students come from different regions and educational backgrounds, including traditional Islamic boarding schools that may not emphasize digital skills. With AI, the technical barriers that have been limiting creative expression are minimal. Students feel more equal in participating in creative discussions and pedagogical innovations. "I can create content that is as good as my friends who study in the communication department," said MUN7. Thus, the ease of use of AI not only improves the quality of content, but also strengthens the fairness of access in education. This is in

line with the principles of Islamic education which emphasizes equality and justice. In the student's view, AI is not an exclusive tool for the technologically literate, but a universal means of empowerment. In fact, some students reported that the experience of using AI has increased their confidence in facing academic tasks and da'wah projects in society.

UIN Walisongo lecturers also appreciated how AI enriches students' teaching methods. They saw a significant increase in students' ability to design learning that was contextual, touching, and based on the values of Ahlussunnah wal Jama'ah. "AI helps students convey Walisongo's values in a new way," said DUN1. "Their creativity is now more directed and relevant to the pesantren community," added DUN2. However, they also emphasized the importance of mentoring so that the use of AI remains within the corridor of traditional Islamic values. "We encourage them to always filter AI output with Islamic glasses," explained DUN3. The lecturers see AI as an opportunity to strengthen, not replace, the tradition of pesantren education. They believe that with the right guidance, AI can actually become an effective and humane means of da'wah in the digital era. "AI is a tool to strengthen, not replace, the noble values of pesantren education," said DUN1. "Students are now more confident in creating local-based learning media," said DUN2. In their view, the key to the successful use of AI lies in ethical awareness, commitment to values, and the ability to integrate technology with local wisdom. They also encourage students to do *member checking* and triangulation of data, including verifying AI content with classic primary sources such as Al-Ghazali's or Ibn Sina's works. Thus, the ease of use of AI does not reduce intellectual depth, but instead encourages integration between technology and the rich Islamic scientific tradition.

Some students also use AI to answer contemporary social challenges, such as radicalism, intolerance, and moral degradation. They design content that strengthens religious moderation and Indonesian values through a creative approach that touches on emotions and the reality of daily life. "I use AI to make a TikTok script about the importance of Bhinneka Tunggal Ika in Islam," said MUN6. "AI helps me draw an analogy between mutual cooperation and the concept of ukhuwah," added MUN1. "I made an infographic about Walisongo's history of tolerance with the help of AI," explained MUN3. In this process, students not only produce content, but also deepen their own understanding of inclusive Islamic values and *rahmatan lil 'alamin*. AI helps them craft narratives that are not patronizing, but invite dialogue and reflection. For example, when explaining the concept of justice, they use the metaphor of a multi-flowered garden or a supportive digital community. "AI helped me explain religious moderation through the metaphor of a garden of flowers," said MUN10. "I can make podcast content about peace between religions," said MUN5. Thus, AI is a medium to actualize Islamic values in a challenging digital public space. This approach shows that creativity in Islamic religious education is not only a matter of aesthetics, but also of social and moral responsibility. Students are aware of their role as agents of change who must be able to answer the challenges of the times in a wise, creative, and value-based way.

However, as is the case in the *Perceived Usefulness* dimension, a small percentage of informants also expressed concerns that the ease of AI actually shallows the creative process. They feel that when ideas come too easily, the spiritual reflection that should be at the heart of religious creativity becomes overlooked. "Sometimes I feel lazy to ponder because AI immediately gives me ideas," said MUN4. "I rarely try to fail, even though from failure is born an original idea," said MUN8. "True creativity requires failure, but AI makes everything feel too smooth," MUN6 added. In their view, true creativity in religious education must be born from a process of personal, spiritual, and cultural struggle—a process that algorithms cannot automate. AI can be a tool, but it cannot replace the inner space where Islamic values are authentically lived and expressed. However, the majority remain optimistic. "AI is a tool, what determines its direction is our intentions and values," said DUN2. "We teach students to always criticize and enrich the results of AI," added DUN1. Students are also aware of their active role in the creative process. "I always insert Walisongo's local values in AI results," said MUN10. "AI helps me faster, but the soul of the work is still from me," said MUN3. In this perspective, AI is seen as a means to reinforce, rather than replace, creative processes rooted in noble values, personal reflection, and social responsibility. Both – technology and values – must go hand in hand in a humanist and pesantren-based educational ecosystem.

4. DISCUSSION

The finding that the use of AI by Islamic Religious Education students encourages increased academic and pedagogical creativity can be explained through the integration of the Technology Acceptance Model (TAM) with contextual creativity theory. The TAM, developed by Davis (1989), emphasizes that the acceptance of a technology is determined by Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). In the context of value-based education such as PAI, these two dimensions not only serve as indicators of technology adoption, but also as triggers for creative expression rooted in Islamic values. According to Amabile, creativity arises when individuals have domain knowledge, intrinsic motivation, and an environment that supports exploration. In this case, AI acts as a creative scaffold: PU reinforces students' intrinsic motivation to create religiously meaningful content, while PEOU creates an environment that minimizes technical barriers, thus allowing them to focus on the process of exploring ideas. Thus, TAM not only explains the adoption of technology, but also becomes the foundation for the emergence of humanist and contextual creativity.

Furthermore, the dynamics between PU and the creative practices of PAI students reflect the meaning-making principle in Constructivist Learning Theory (Vygotsky, 1978). Students do not use AI as a single source of truth, but rather as a dialogical partner in building new meanings for religious texts. For example, when asking AI to generate a contemporary analogy for the concept of zakat or to construct a Walisongo-based narrative, students are actually engaged in a process of recontextualization—translating the universal values of Islam into a cultural and social framework that is relevant to the younger generation. This process is in line with Sundari's idea of the importance of narrative in the formation of understanding. In this framework, PU is not just about efficiency, but the ability of AI to facilitate symbolic transformation: transforming abstract ideas into symbolic forms—stories, visuals, podcasts—that audiences can experience and understand emotionally. Therefore, the benefits of technology are perceived not only in its output, but in its role as a medium for transforming Islamic values in a lively and dynamic creative form.

On the other hand, the role of PEOU in encouraging the creativity of PAI students can be understood through the lens of Cognitive Load Theory and Flow Theory. When AI interfaces are perceived as easy to use, the extrinsic cognitive load—that is, the mental effort to operate the technology—is significantly reduced. This allows students to shift their cognitive capacity entirely to creative tasks, such as composing religious poems or designing da'wah posters. In such conditions, they are more likely to enter a state of flow: an optimal experience in which individuals are immersed in activities due to balanced challenges and skills. The exploration of hybrid formats and the adaptation of religious content into popular culture, such as TikTok scripts or comics based on the stories of the Prophet's companions, became possible because students were not bothered by technical barriers. Thus, PEOU is not just an accessibility factor, but a catalyst that opens up an imaginative space where Islamic values are restated through original forms that blend aesthetics, social relevance, and contextual sensitivity. In this ecosystem, technology does not replace the role of humans, but rather expands their ability to create meaningfully.

The novelty of this research lies in the unprecedented contextual integration between the Technology Acceptance Model (TAM) and the dynamics of creativity of prospective Islamic Religious Education teachers in the modern Islamic boarding school-based education ecosystem. Unlike previous research that generally examined the use of AI in the context of general or technical education, this study specifically explored the interaction between technology, spirituality, and religious creativity. For example, Barakat et al., (2024) in their study entitled "Factors Influencing the Acceptance of Artificial Intelligence in Education" did apply TAM to understand the acceptance of AI among students, but the focus is general and does not consider the dimensions of values, ethics, or religious context. Similarly, Cahyono et al., 2024 identify the benefits of AI in administrative efficiency and personalization of learning, but do not touch on aspects of pedagogical creativity especially in the context of religious education. Meanwhile, Nasih et al., (2024) in their comprehensive study mapped the global trend of AI utilization, but concluded that research on the implications of AI in the humanities—especially religious education—is still very limited and tends to be speculative. Different from the three, this study not only expands the application of TAM to the realm of Islamic Religious Education, but also introduces a critical-

humanist approach that places Walisongo values, spiritual reflection, and epistemological concerns as the axis of analysis (Hefni, 2018). Thus, this study fills a significant gap in the literature by offering an interpretive framework that is contextual, ethical, and based on empirical reality in the PTKIN environment (Amilusholihah & Ramadhan, 2025; Ansori et al., 2025).

Based on the findings of this study, policymakers on campus can immediately take strategic steps to optimize the use of AI in supporting the creativity of prospective Islamic Religious Education teachers without sacrificing spiritual depth and value integrity. First, campuses need to integrate value-based AI literacy training into the curriculum, both through compulsory courses and ongoing workshops, which not only teach how to use AI, but also train students to criticize, filter, and enrich AI outputs with Islamic principles, Walisongo local wisdom, and critical thinking ethics. Second, the development of ethical and pedagogical guidelines for the use of AI for lecturers and students is urgent, emphasizing that AI is a dialogical partner, not a substitute for reflective and creative processes born from personal struggles with religious values. Third, campuses need to strengthen inclusive digital infrastructure while encouraging community-based mentoring, such as *AI-creativity mentorship* by lecturers or seniors, so that students—especially those from pesantren or remote backgrounds—are not only able to access technology, but also use it meaningfully and responsibly. With these measures, the campus will not only become a space for technology adoption, but also a bastion of value control in the digital transformation of Islamic education.

5. CONCLUSION

The most interesting finding of this study shows that the use of Artificial Intelligence (AI) in Islamic education does not necessarily result in technological dependency or a weakening of students' thinking capacity, as is widely feared in the digital education literature. Instead, AI functions as an instrument that expands the space for pedagogical and religious reflection among Islamic Education students at UIN Walisongo Semarang. This study found that students do not position AI as the sole source of truth or a substitute for Islamic scholarly authority, but rather as an intellectual partner that helps explore ideas, develop learning materials, and strengthen academic creativity. More importantly, students' critical thinking skills emerge when they must verify, select, and contextualize AI-generated information with Islamic values, academic traditions, and the social realities they face. This finding reveals a pedagogical paradox: the more sophisticated the technology used, the greater the need for students to have reflective skills, ethical judgment, and human wisdom that cannot be replaced by algorithms. Thus, this study offers a new perspective that the relationship between AI and Islamic education is not antagonistic, but rather dialogic and transformative. AI is not a threat to the formation of students' Islamic identity, but rather can be a catalyst for the development of 21st-century competencies when integrated through a critical, ethical, and values-based pedagogical approach. These findings also enrich the global discourse on AI in education by demonstrating that modern technology can go hand in hand with the strengthening of religious values, moral reflection, and knowledge construction rooted in the local context of Indonesian Islamic education.

The main weakness of this study lies in the limitations of the method and the scope of the locus. First, this study uses a *narrative inquiry approach* that—while very effective in delving into the depths of subjective experience and personal meaning—produces data that is contextual, idiographic, and not designed for statistical generalization. This approach does allow for an in-depth exploration of how students interpret the use of AI in religious creativity, but at the same time limits the ability of research to draw conclusions that apply broadly outside the specific context of UIN Walisongo Semarang. Second, this research was only conducted in one institution, namely UIN Walisongo, which has distinctive characteristics as PTKIN based on Islamic boarding school traditions and Walisongo's wisdom. These geographical and institutional limitations have an impact on the homogeneity of the socio-cultural, educational, and religious backgrounds of the respondents, so that the findings cannot be immediately transferred to other PTKIN contexts, let alone to public or cross-country institutions. To address these weaknesses, future research needs to expand its scope by conducting comparative studies across institutions, regions, and cultural backgrounds, both within and outside the PTKIN environment. In addition, combining *narrative inquiry* with mixed methods or long-term ethnographic approaches can enrich the validity of

findings and strengthen their conceptual transferability. Importantly, future research needs to explore how structural variables—such as digital infrastructure, campus policy support, and economic access disparities—affect patterns of AI use in Islamic religious education in a variety of different social contexts.

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