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SYNERGY BETWEEN EDUCATIONAL TECHNOLOGY AND ISLAMIC RELIGIOUS EDUCATION: EFFORTS TO REALISE CHARACTER-BASED LEARNING, SPIRITUAL VALUES, AND RESPONSIVENESS TO THE CHALLENGES OF THE 21ST CENTURY DIGITAL CIVILISATION

Muhammad Arsyad
Universitas Sulawesi Barat
acca4603@gmail.com

Ismaul Fitroh
Universitas Negeri Gorontalo
ismaulfitroh@ung.ac.id

Abstract

This study examines the synergy between educational technology and Islamic Religious Education (IRE) as a strategic effort to realise character-based learning, spiritual values, and responsiveness to the challenges of the 21st-century digital civilisation. Using a descriptive qualitative approach based on literature review, the study analyses the integration of digital platforms such as blended learning, adaptive AI, and Qur'anic-based interactive media in the formation of Islamic character. The main discussion covers the synergy between technology and PAI in strengthening the values of trustworthiness, ihsan, and piety in virtual spaces, as well as implementation and challenges such as the digital divide, negative content distractions, and dehumanisation of interactions, which are overcome through Islamic digital literacy and hybrid spiritual sessions. The results confirm that this synergy produces an adaptive Muslim generation that combines technological skills with akhlakul karimah (good character), becoming the foundation of holistic national education in the Society 5.0 era.

Keywords: educational technology synergy, Islamic Religious Education, character education, spiritual values, digital civilisation, Islamic literacy, blended learning

Introduction

The development of educational technology in the 21st century has marked a major change in the learning paradigm around the world. The digital revolution has brought unprecedented ease of access to information, speed of communication, and efficiency in learning management. Learners are no longer confined to conventional classrooms but learn through digital platforms such as *Learning Management Systems* (LMS), *Massive Open Online Courses* (MOOCs), and various online-based applications that facilitate flexible and collaborative learning (Escueta et al., 2025) . This transformation presents a great opportunity for the education system to improve the quality and effectiveness of the teaching and learning process. However, technological advances also pose serious challenges to the values of humanity, character, and spirituality that have long been the moral foundation of education.

In the context of Islamic education, technological advances are not only an opportunity but also a test of the extent to which Islamic religious education (PAI)

values can adapt without losing their essence. PAI has the main mission of shaping individuals who are faithful, have noble character, and are able to implement spiritual values in their daily lives (Dalton, 2017) . When students are in the midst of a rapid flow of information and a fast-paced digital culture, religious education is required to not only teach theological knowledge, but also equip students with critical thinking skills and digital ethics based on Islamic values. Therefore, the synergy between educational technology and PAI is an important agenda in the effort to produce a generation of Muslims who are intelligent, have good character, and are adaptive to global challenges (Aslan, 2019) .

Modernisation in the world of education is often equated with the rationalisation and secularisation of knowledge, which in some cases can erode the spiritual and moral dimensions. This is where the urgency of PAI becomes highly relevant, as it serves to maintain a balance between intellectual intelligence and moral wisdom. The integration of technology in PAI should not only be interpreted as the digitisation of teaching materials, but also as a strategic effort to bring Islamic principles to life in the virtual space (Widiatmoko et al., 2024) . In this way, students are not merely users of technology, but are also able to direct its use to develop strong character, social responsibility, and spiritual awareness.

Meanwhile, the global education world is currently facing complex challenges from the *Society 5.0* era — where humans and technology are integrated into one intelligent ecosystem. On the one hand, this development requires high digital competence; on the other hand, it risks promoting dehumanisation and the loss of ethical values. Islamic education has the strategic potential to become a "moral balancer" in this transformation process (Aslan & Sidabutar, 2025) . If technology is used wisely based on Qur'anic values, it can become a more effective instrument of da'wah, a medium for teaching morals, and a means of character building. This is where the importance of a synergistic design lies, one that is not only technical but also ideological and pedagogical (Hendriarto et al., 2021) .

In its implementation, many Islamic educational institutions have begun to adopt technologies such as *e-learning*, *smart classrooms*, and interactive applications to teach tafsir, hadith, or fiqh. However, the adoption of this technology is often still instrumental in nature — merely replacing old methods with new media. In fact, the essence of true synergy should involve the integration of values and meaning. The technology used in PAI must contain educational and spiritual principles: instilling awareness of Allah's greatness, fostering a sense of social responsibility, and strengthening Islamic identity in the digital space. Thus, character-based learning and spiritual values can grow naturally from a technology-based learning system (Widiatmoko et al., 2024) .

Furthermore, the synergy between technology and Islamic religious education is also related to the formation of *digital ethics* based on Islamic teachings. Students must be guided to understand the etiquette of online interaction, such as maintaining

proper speech, respecting privacy, and avoiding the spread of hoaxes or destructive content. Religious education plays an important role in internalising the principles *of al-akhlaq al-karimah* in the context of the virtual world (Sari et al., 2025) . By framing the use of technology through Islamic values, schools and teachers help create a productive, ethical, and worship-oriented digital ecosystem. This is the basis for character-based learning in the digital age that not only educates the mind but also nourishes the heart (Aslan et al., 2019) .

In addition to ethical and spiritual education, the integration of technology with PAI is necessary to foster critical, creative, and collaborative thinking skills — key skills for the 21st century. Through a *project-based learning* or *flipped classroom* approach based on Islamic values, students can learn to actively relate revelatory texts to contemporary social contexts. Technology provides space for digital interpretation exploration, Qur'anic value-based social simulations, and collaboration between students across Islamic countries. The ultimate goal is not only to produce students who are proficient in using technology, but to build individuals who are *rahmatan lil 'alamin* — who use knowledge and technology as a means of serving humanity (Islim, 2022) .

However, the challenges of using technology are not insignificant. The phenomena of gadget addiction, dependence on social media, and instant culture often cause students to lose their spiritual focus and social empathy. Data shows an increase in symptoms *of digital fatigue* and a decline in empathy due to excessive online interaction. If not balanced with values education, technology can create emotional inequality and moral degradation (Aslan, 2022) . Therefore, the PAI curriculum must be designed adaptively so that it can respond to modern problems without losing its spirit. The development of Islamic digital literacy is key to encouraging critical awareness and moral selectivity amid the rapid flow of information.

Teachers are central actors in this synergy. They are not only facilitators of digital learning, but also spiritual educators who instil moral values in every online interaction. The competencies of PAI teachers in the 21st century must include four main dimensions: technological literacy, Islamic literacy, value literacy, and humanitarian literacy (Caroline & Aslan, 2025) . Teachers who are able to combine these four dimensions will create a learning process that is not only informative but also transformative — shaping students' characters to be integrity-driven, disciplined, and highly socially and spiritually aware. Therefore, improving teachers' capacity through Islamic value-based technology training is an urgent need (Putra & Aslan, 2019) .

On the other hand, the government and Islamic educational institutions need to strengthen integrative policies that place technology as a spiritual instrument, not merely an administrative tool. The development of value-based and technology-based curricula must refer to the principles *of integrative education* — which unites the aspects of knowledge, skills, and virtue. This approach ensures that Islamic education

does not lag behind the times but instead becomes a source of innovation for national character building (Manullang et al., 2021) . With the support of progressive policies, the synergy between educational technology and PAI can provide a new direction for national education reform that is religious in character and globally competitive.

Furthermore, technology-based PAI learning can be a solution to the challenge of equal access to education. In remote areas or conflict zones, digital technology can deliver religious lessons through online media, interactive videos, and lightweight and inexpensive Islamic learning applications. This is in line with the spirit of Islam as a religion *of rahmatan lil 'alamin* — reaching all people without geographical boundaries (Islim, 2022) . Therefore, the use of technology must be oriented towards social justice and humanistic da'wah, not merely the reproduction of formal knowledge. Thus, PAI can be inclusive across all levels of society.

In a global context, the synergy between technology and Islamic education is also part of the strategy to face the challenges of the digital civilisation, such as the secularisation of values, moral relativism, and the erosion of identity. Islamic education is expected to be proactive rather than defensive — seizing the digital space as a medium for da'wah and value transformation. The use of social media, creative content, and application-based education provides an opportunity to instil Islamic character in the digitally literate younger generation. In this case, teachers, scholars, and educational figures act as mentors and moral innovators in the virtual world (Hidayat, 2022) .

Ultimately, the synergy between educational technology and PAI is a strategic effort to realise holistic learning: uniting the cognitive, affective, and psychomotor dimensions within the framework of Islamic values. Through this synergy, education not only produces intellectually competent students but also emotionally and spiritually mature ones. Character-based learning, spiritual values, and responsiveness to the challenges of the digital civilisation will become a solid foundation for the birth of a 21st-century Muslim generation that is globally competitive and has good character.

Research Method

The research method used in this study is descriptive qualitative research with a library research approach that focuses on conceptual and normative analysis of the synergy between educational technology and Islamic religious education (PAI) in character-based learning and spiritual values (Eliyah & Aslan, 2025) . Data was collected from various literature sources, such as scientific journals, Islamic education books, educational technology articles, and national and international education policy documents relevant to 21st-century learning issues. Literature review is the main strategy for exploring theories and concepts related to the integration of Islamic values and technological innovation, as stated by Miles and Huberman that qualitative analysis is carried out through the stages of data reduction, data presentation, and

thematic conclusion drawing (Fink, 2014) . This research is based on the theoretical framework of constructivism and integrative-holistic Islamic education, which emphasises a balance between intellectual, moral, and spiritual aspects in learning. Using this method, the research aims to produce a deep understanding of the application model and implications of the synergy between educational technology and PAI in responding to the challenges of the 21st-century digital civilisation.

Results and Discussion

Synergy between Educational Technology and PAI Values in Character Building

The development of educational technology in the digital era has significant consequences for the patterns, behaviour, and character of students. Technology is not only a learning tool but also shapes a new cognitive and social ecosystem that directly impacts the moral and identity formation of students. In this context, Islamic religious education (PAI) has a strategic role to ensure that technological advances are in line with the moral and spiritual values of the Islamic way of . PAI needs to synergise with technology to provide a learning system that not only emphasises intellectual intelligence but also internalises Islamic values in the digital behaviour of students. This concept of synergy represents the idea that education and technology are not two opposing entities, but rather two forces that can reinforce each other in shaping noble human character (Rusiadi & Aslan, 2024) .

The integration of PAI and educational technology can be understood as an effort to adopt media, devices, and technology platforms into the learning process based on Islamic values. In practice, this can be done through the use of *Learning Management Systems* (LMS), interactive videos, digital interpretation applications, and educational social media used to deepen religious understanding (Legris, 2003) . This is where the synergy lies: technology is used not only to convey religious information, but also to instil a spirit of religiosity, responsibility, and digital honesty. Thus, technology is not a threat to Islamic values, but rather an effective means of spreading moral and spiritual values to a generation born and raised in a digital culture (Schmidt, 2009) .

The character values promoted by PAI, such as honesty (*ṣidq*), responsibility (*amānah*), discipline, hard work, and social awareness, are highly relevant in shaping the behaviour of students in the digital world. When a student is taught to use technology ethically — for example, not cheating via the internet, not spreading fake news, or not committing digital plagiarism — they are actually practising the Islamic values of trustworthiness and integrity (Fitriani et al., 2024) . Therefore, synergistic learning between technology and Islamic Education values must be consciously designed so that every digital interaction becomes a space for character building, not merely an academic activity. This learning process will build moral awareness as well as Islamic digital literacy.

Digital transformation in PAI also requires a paradigm shift in teaching methods. Teachers no longer act as the sole source of knowledge but become *spiritual mentors* and *digital guides* for students. Through technological media, teachers can convey Islamic teachings with a more creative and contextual approach, such as the use of creative da'wah videos, interactive simulations on morals, and value-based educational games. This learning process allows students not only to memorise Islamic teachings but also to practise them in the virtual reality they encounter every day (Tondeur, 2024) . With this approach, learning activities become both enjoyable and morally meaningful. The synergy between educational technology and PAI values also expands the meaning of spiritual learning to be more dynamic. In the past, religious education was often one-sided and conventional; now, with the help of technology, communication between teachers and students can be interactive, reflective, and participatory. Online discussions, Islamic reflection forums, and digital-based spiritual counselling services provide space for students to openly express their spiritual experiences (Rahman et al., 2025) . This pattern of interaction fosters deeper emotional engagement, as students feel that religious values are relevant to the real world they live in in the digital age.

From a pedagogical perspective, the integration of technology in PAI helps to form a character-based learning system that is adaptive to the times. Learning can be tailored to the needs and learning styles of millennial and Generation Z students, who tend to be visual, interactive, and quick to respond to digital stimuli. Qur'anic learning video applications, hadith values quiz platforms, or digital reflection systems can be means of forming an updated moral awareness. With this contextual approach, PAI can restore the main function of education as a means of forming good character amid the challenges of information globalisation (Hilton, 2018) .

The integration of technology and Islamic values in learning also requires proportional ethics of use. The Prophet Muhammad emphasised the importance of manners in every human action, and this principle remains relevant in the use of modern technology. Digital ethics such as respecting the privacy of others, being wise in filtering information, and using social media for beneficial purposes are concrete manifestations of PAI values. Teachers can integrate the concepts *of ihsan* (doing good) and *taqwa* (awareness of Allah's supervision) as the foundation of Islamic digital education. The awareness that every online activity is supervised by Allah SWT will train students to have moral control even in cyberspace (Hifza & Aslan, 2020) .

In the context of character building, Islamic value-based educational technology must be directed towards the formation of a meaningful life, not merely academic productivity. Technology should be a means of self-development that is in line with the spiritual goals of humans, namely to be responsible caliphs on earth. Through Islamic character-based learning, students are trained to think reflectively, be able to assess actions from a moral perspective, and dare to make ethical decisions in the digital world. The synergy between PAI and technology thus forms an integral mindset that

combines modern logic with Islamic spiritual wisdom (Pratiwi et al., 2024) . In addition to shaping individual personalities, this synergy also has a broad social dimension. PAI can use technology to foster social solidarity and humanitarian concern. For example, through digital campaigns themed around online charity, online Qur'an literacy programmes, or collaboration between students on Islamic value-based social projects. These activities not only hone students' digital skills, but also foster empathy and a spirit of togetherness as taught in Islam. In this context, technology becomes a medium for social da'wah as well as character education that instils the values of ukhuwah and mutual cooperation (Al-Emran, 2025) .

The synergy between educational technology and PAI also has implications for curriculum development and educational policy. The PAI curriculum needs to be designed with technology in mind as a new learning space that is as important as the physical classroom. Islamic values are contextualised in themes of digital literacy, media ethics, and moral leadership in the virtual world. Thus, students not only learn about religious values in theory but also know how to apply them in a digitally connected social reality. This integrative curricular approach makes Islamic education more relevant and visionary in the 5.0 era (Crompton, 2025) .

Furthermore, the synergy between technology and PAI emphasises the importance of collaboration between teachers, parents, and educational institutions in instilling character values. Parents, as their children's primary companions in the digital world, must have adequate technological literacy and understanding of Islamic values so that they can be role models in the use of technology at home. Meanwhile, educational institutions must provide a learning environment that supports character building, such as content control systems, Islamic educational applications, and Islamic digital ethics training for students and teachers. This collaboration will create an educational ecosystem that is consistent between the values taught and the behaviours practised (Chatterjee, 2024) .

Ultimately, the synergy between educational technology and Islamic education values is not merely about adapting to the times, but about reconstructing the very essence of education itself. True education does not stop at the transfer of knowledge, but must be a process of shaping a balanced human identity between reason and heart, between knowledge and virtue. Technology is only a tool, but with Islamic values as its soul, it becomes an instrument for shaping a strong, innovative character with good morals. Thus, this synergy will give birth to a 21st-century Muslim generation that is digitally literate, spiritually integrated, and ready to face the challenges of global civilisation without losing its Islamic identity.

Implementation and Challenges of Islamic Education (PAI) in the 21st Century Digital Age

The implementation of Islamic Religious Education (PAI) in the 21st century digital era requires a comprehensive transformation from conventional methods to a

hybrid approach that integrates technology as a strategic partner. Platforms such as *Zoom*, *Google Classroom*, and specialised IRE applications such as *Al-Qur'an Digital* or *Hadith Companion* have become key tools in delivering religious material efficiently and reaching students in various regions. However, this implementation should not be mechanical; it must be designed with Islamic pedagogical principles that emphasise a balance between religious knowledge and digital skills (Chatterjee, 2024) . PAI teachers are required to transform virtual classrooms into digital mosques — places that not only transfer knowledge but also build loving teacher-student relationships and provide spiritual guidance. Thus, technology becomes a bridge between classical Islamic scholarship and contemporary learning needs (Granić, 2022) .

One of the most effective forms of implementation is *blended* PAI *learning*, which combines face-to-face learning with interactive digital content. Students can access materials on tafsir, fiqh, and aqidah through 360° videos, virtual hajj simulations, or augmented reality (AR) to visualise the stories of the prophets in a vivid manner. This approach allows for personalised learning according to the students' level of understanding, while maintaining the essence of direct interaction that is characteristic of traditional Islamic education (Oyelere et al., 2018) . Teachers can monitor students' spiritual progress through an analytics dashboard, provide personalised feedback based on Qur'anic values, and hold online *mushawara* sessions to discuss contemporary issues such as Islamic bioethics or digital sharia economics. The implementation of this model proves that technology can enrich, rather than replace, the holistic dimensions of PAI (Firmansyah & Aslan, 2025) .

The use of *Artificial Intelligence* (AI) in PAI also opens a new paradigm in personalising spiritual learning. Tafsir-based AI chatbots can instantly answer students' questions about verses from the Qur'an, while adaptive algorithms recommend hadith readings according to students' character profiles. *Natural Language Processing* (NLP) technology can even analyse students' reflective writing to detect their level of taqwa awareness and provide suggestions for personal character development (Rogers, 2003) . However, the implementation of AI must be limited by the Islamic principle *of tawassuth* — not overdoing dependence on technology to the point of eroding essential human interaction in religious education. With wise supervision from teachers, AI becomes a spiritual assistant that strengthens, rather than replaces, the role of educators as *murshid* (Nurfadilah et al., 2023) .

Despite its great potential, the implementation of digital PAI faces significant accessibility challenges, especially in rural and remote areas of Indonesia. The *digital* divide means that some students do not have adequate devices or stable internet connections to participate in online learning. This contradicts the Islamic principle of justice (*'adl*), which demands equal access to religious knowledge (Khan, 2024) . Inclusive implementation solutions are needed, such as the development of *offline-first* PAI applications that can be downloaded through mosque community centres, the distribution of tablets pre-loaded with standard curricula, or *radio streaming* systems

based on local Ulama lectures. Without addressing these obstacles, PAI digital reform risks widening the religious knowledge gap between social groups (Bond et al., 2024).

Another crucial challenge is *digital distraction* and the degradation of students' *attention span* in the era of short content such as TikTok and Reels. This phenomenon threatens the effectiveness of PAI learning, which requires deep concentration for contemplating verses of nature and inner reflection. Students tend to multitask between religious lessons and social media notifications, resulting in a decline in spiritual material retention and a deep understanding of the concept of tawhid . PAI teachers must adopt Islamic *microlearning* strategies — short but meaningful material packaged in the format *of* Qur'anic *storytelling* or hadith *infographics* — while training digital discipline through time management applications (*digital detox*) based on the teachings of the Prophet Muhammad SAW on zuhud towards the world (Escueta et al., 2025) .

Negative content and religious hoaxes on social media pose an existential threat to the integrity of digital Islamic Education. The spread of misguided interpretations, manipulative videos, and radical narratives through platform recommendation algorithms can poison the understanding of young students who are not yet cognitively mature. This challenge calls for comprehensive Islamic digital literacy as an integral part of the PAI curriculum (Dalton, 2017) . Students must be taught the methodology of digital *jarh wa ta'dil* — source verification, analysis of information chains, and the principle *of ittisal* (information chain connectivity) in the context of the internet. PAI teachers act as digital *muhaqqiq* who train students to distinguish between haq and bathil in the virtual world, just as classical Ulama did with hadith (Aslan & Putra, 2020).

The dehumanisation of interactions due to virtual learning is also a serious issue in the implementation of PAI. The lack of eye contact, physical touch in greetings, and the sacred atmosphere of the mosque can reduce the emotional and spiritual dimensions of religious learning. Humanistic implementation solutions include *hybrid spiritual sessions* — combining video calls with physical rituals such as congregational prayer before learning, or *virtual reality mosques* that immersively reproduce the atmosphere of a mosque. This approach ensures that technology does not eliminate *the spirit* of Islamic education, but rather expands its reach while maintaining the warmth of the teacher-student relationship that is characteristic of the Islamic scholarly tradition of the Indonesian archipelago (Dalton, 2017) .

The competency gap among PAI teachers in technology is the main bottleneck in digital implementation. Many senior educators who are accustomed to memorisation and sorogan methods find it difficult to adopt modern platforms, causing resistance and ineffective learning. A massive *upskilling* programme is needed, including Islamic *EdTech* training, Sharia-based *Google Educator* certification, and internships at modern *digital Islamic boarding schools*. The government, through the Ministry of Religious Affairs, must allocate a special budget for *the digital transformation* of PAI *teachers*, including incentives for teachers who successfully

implement quality blended learning. Without this capacity building, the vision of 21st-century Islamic education will be hampered by limited human resources (Judijanto & Aslan, 2024) .

The evaluation of digital PAI learning also faces complex methodological challenges. Online tests are prone to plagiarism and *cheating bots*, while spiritual assessments such as *mutaba'ah* (observation of morals) are difficult to conduct without direct observation. The implementation of adaptive solutions such as *authentic* digital *assessment* — video reflection portfolios, online community da'wah projects, or peer review based on sharia rubrics — is a necessity. A *blockchain certification* system for Islamic certificates can also guarantee the academic integrity of digital PAI. This evaluative approach ensures that learning outcomes are not only cognitive but also reflect the transformation of students' character and spirituality (Widiatmoko et al., 2024) .

From a policy perspective, the implementation of digital PAI requires comprehensive national regulations. The Merdeka Curriculum must be enriched with *Islamic Digital Citizenship* modules that integrate religious literacy with 21st-century competencies. The Ministry of Religious Affairs and the Ministry of Education, Culture, Research, and Technology need to collaborate to develop *national standards for digital PAI* that cover infrastructure, content, and human resources. This policy must be oriented towards *maqasid syariah* — the five objectives of sharia law ( ) of protecting religion, life, intellect, lineage, and property — within the framework of national digital transformation. Financial support for *4.0 Islamic boarding schools* and *smart madrasahs* will accelerate technology adoption without compromising Islamic identity (Sari et al., 2025) .

Ethical challenges in digital Islamic education are equally important, particularly regarding student data privacy and content monitoring. The collection of learning behaviour data for spiritual analytics risks misuse if there are no strict regulations in place. The principle *of hifz al-'ird* (preserving honour) requires end-to-end data encryption, informed consent from parents, and independent audits of learning platforms. PAI teachers must be *data stewards* who are sharia-compliant in their responsibility for student information, ensuring that technology serves the mission of education rather than commercial exploitation (Islim, 2022) .

The successful implementation of digital PAI also depends on the involvement of parents as *the first madrasah*. Islamic *digital parental coaching* programmes can equip guardians with the skills to monitor their children's online activities, integrate home teaching with the school curriculum, and become role models for digital ethics. PAI *family dashboard* applications that display children's progress, value-based homework, and family worship reminders will strengthen the synergy of Islamic education triangulation. This parent-teacher-student collaboration creates a consistent and sustainable educational ecosystem (Hidayat, 2022) .

Ultimately, the implementation and challenges of PAI in the 21st-century digital era represent a test of Islamic education's adaptability to the dynamics of civilisation. Technology is not the ultimate goal, but rather a means to achieve digital perfection, enabling individuals to navigate the complexities of the virtual world with a firm grasp of faith and noble character. By overcoming barriers of access, competence, content, and ethics through an integrative approach, PAI can become the vanguard of national character education that is globally relevant and locally authentic. This visionary synergy will give rise to a generation of Indonesian Muslims who are not only technologically literate but also guardians of the moral values of the 21st-century digital civilisation.

Conclusion

The synergy between educational technology and Islamic Religious Education (PAI) has proven to be an effective strategy in realising character-based learning, spiritual values, and responsiveness to the challenges of the 21st-century digital civilisation. Through the integration of digital platforms such as blended learning, adaptive AI, and Qur'anic-based interactive media, PAI not only survives in the digital age but also develops into an instrument for shaping intelligent individuals who are technologically savvy and have good character. The discussion shows that this synergy is able to overcome moral degradation due to digital distractions, religious hoaxes, and access gaps by instilling values such as trustworthiness, ihsan, and piety in every online interaction. The result is a generation of Muslims who are adaptive, critical, and humanistic, where technology becomes a means of moral preaching rather than a threat of secularisation.

Character building through the synergy of PAI and technology emphasises a balance between the cognitive, affective, and spiritual dimensions, as discussed in the analysis of implementation and challenges. PAI teachers, as digital mentors, have successfully transformed virtual spaces into holistic learning ecosystems that combine Islamic digital literacy with modern jarh wa ta'dil methodologies for online information. Challenges such as the digital divide, dehumanisation of interactions, and AI dependency are overcome through inclusive approaches, such as offline-first applications and hybrid spiritual sessions, making PAI learning relevant both nationally and globally. This approach proves that Islam, as a religion of rahmatan lil 'alamin, is capable of seizing digital space to strengthen Islamic identity without losing its traditional essence.

Overall, this study confirms that the synergy between educational technology and PAI is not merely a technical adaptation, but a visionary pedagogical reconstruction to face Society 5.0. This integrative model gives rise to responsive learning that equips students with 21st-century competencies based on spiritual values, enabling them to navigate the complexities of digital civilisation with high moral integrity. Successful implementation depends on stakeholder collaboration —

teachers, parents, institutions, and government — to create a sustainable and competitive Islamic education ecosystem. Thus, this synergy becomes a solid foundation for national education that produces intellectually, emotionally, and spiritually superior generations amid contemporary global dynamics.

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