

STRENGTHENING ISLAMIC CHARACTER IN ISLAMIC EDUCATION AMID TECHNOLOGICAL DISRUPTION: A CRITICAL ANALYSIS OF THE IMPLEMENTATION OF MORAL EDUCATION AND DIGITAL ETHICS IN SCHOOLS

Muhammad Yusuf

UIN Antasari Banjarmasin
muhammadyusuf@uin-antasari.ac.id

Muhammad Nur Effendi

UIN Antasari Banjarmasin
fendi@uin-antasari.ac.id

Abstract

Technological disruption in the digital age presents complex challenges for Islamic Religious Education (PAI) in shaping pupils' Islamic character, whilst simultaneously opening up innovative opportunities for strengthening moral values through digital media. This study aims to critically analyse the implementation of moral and digital ethics education in PAI lessons in schools, as well as to identify the challenges and strategies for strengthening Islamic character amidst technological disruption. The method employed was a literature review using a qualitative-descriptive approach, in which data were collected through the search, identification, analysis and synthesis of various relevant academic sources. The research findings indicate that the implementation of digital ethics and moral education in PAI has been carried out through various models, such as the integration of Islamic values into technology-based learning, teachers serving as exemplary role models (*uswah hasanah*), the utilisation of digital platforms for daily moral guidance, and strategic collaboration between schools and parents. However, this implementation still faces significant challenges, including low digital literacy among PAI teachers, technological distractions that divert pupils' attention, a lack of supervision from parents and teachers, exposure to negative content, and social media addiction that hinders the internalisation of moral values. The recommended strategies for strengthening Islamic character include the integration of Islamic values into every digital learning activity, strengthening teachers' role as role models in the digital space, the development of digital literacy grounded in Islamic values covering cognitive, technical, ethical and spiritual dimensions, close collaboration between schools and families, and the application of a reflective-dialogic learning approach that emphasises critical discussion of digital ethical dilemmas. Through a comprehensive, holistic and sustainable approach, Islamic Religious Education (PAI) can be transformed from merely the transfer of religious knowledge into a vehicle for character development that equips learners with digital competencies and ethical awareness to become responsible digital citizens of noble character who contribute positively to society in the Society 5.0 era.

Keywords: Islamic character, Islamic Religious Education, technological disruption, moral education, digital ethics, Islamic digital literacy.

Introduction

The Fourth Industrial Revolution and Society 5.0 have brought about fundamental transformations in various aspects of life, including education, where rapid advances in digital technology have created a disruption that is altering patterns of interaction, access to information, and the way the younger generation learns (Putra et al., 2020); (Putra and Aslan, 2020). In the context of Islamic education, technological disruption presents a complex paradox: on the one hand, it opens up opportunities for adaptive and creative learning innovations; on the other hand, it threatens the moral and spiritual degradation of learners due to the overwhelming flow of information that is not always in line with Islamic values (Widjaja and Aslan, 2022). This phenomenon demands that Islamic Religious Education (PAI) not only adapt technically but also undergo a philosophical and pedagogical reorientation in order to remain relevant and effective in shaping Islamic character amidst an increasingly dominant digital reality.

The first challenge facing Islamic education in the era of disruption is the gap between traditional teaching methods, which remain dominant, and the nature of the digital generation, who prefer interactive, visual and technology-based learning (Trisnawati et al., 2025). If not adapted promptly, Islamic Education (PAI) runs the risk of losing its appeal and relevance in the eyes of pupils who have become accustomed to the fast-paced, engaging and personalised dynamics of digital content. This situation is exacerbated by the fact that many PAI teachers still face limitations in their digital competence, both in the technical aspects of using learning platforms and in strategies for integrating moral values into digital media (Utami et al., 2024).

A further challenge is the abundance of unverified, extreme, or even deviant religious information in the digital space that strays from moderate Islamic teachings, thereby potentially influencing pupils' religious understanding and practice (Aslan, 2019). The dominance of social media algorithms, which tend to highlight sensational content and polarise religious understanding, further undermines the authority of traditional religious figures such as ulama and teachers, who were previously the primary sources of religious guidance. In this context, the principle of *tabayyun* (verification of information), as taught in the Qur'an, serves as a critical foundation that should equip students with a selective and responsible approach to consuming digital religious content (Anwar et al., 2026).

Moral degradation in cyberspace is becoming an increasingly worrying phenomenon, characterised by the spread of fake news, hate speech, cyberbullying, and various other forms of digital crime, which highlight a disconnect between internet users' technical skills and their ethical awareness (Sofyana and Haryanto, 2023). Data from the Digital Civility Index indicates that levels of digital civility in Indonesia remain low, reflecting an ethical crisis in interactions within virtual spaces. The main issue lies not merely in breaches of digital ethics, but in the breakdown of the chain of moral education that should be continuous between the real world and the virtual world, meaning that

learners lack consistent moral guidance on how to behave in both spheres (Darmawan and Sagita, 2026).

From an Islamic perspective, digital ethics is not merely a social convention, but a manifestation of religious belief and the perfection of faith, which carries theological implications (Anwar et al., 2026). The main principles of digital ethics in Islam include: (1) Muraqabatullah, which is the inner awareness of Allah's supervision as an internal control; (2) Tabayyun, which is the obligation to verify information to prevent slander; (3) Integrity and trustworthiness in managing information; and (4) Control over speech and writing based on the principle of 'speak well or remain silent', as stated in the hadith narrated by al-Bukhari (Anwar et al., 2026). These principles should form the foundation for formulating an integrative and revelation-based digital ethics education, rather than merely an adaptation of secular norms.

Islamic Religious Education (PAI), as a curricular component in schools and madrasahs, plays a strategic role in shaping pupils' moral character and ethical behaviour, including equipping them with an understanding of digital ethics grounded in Islamic values (Yanti et al., 2022). Through the subjects of Aqidah-Akhlak, Fiqh, and Al-Qur'an-Hadith, PAI has the opportunity to instil values such as honesty (siddiq), responsibility (amanah), verification (tabayyun), and maintaining honour (iffah) within the context of digital technology use. However, the implementation of this digital ethics education still faces various obstacles, such as limited facilities, low student motivation to learn, and a lack of parental involvement in monitoring children's digital behaviour at home (Untari et al., 2025).

On the other hand, digital technology also offers significant opportunities to strengthen the internalisation of Islamic character values through various innovative learning media, such as educational videos, interactive e-learning platforms, Qur'an memorisation apps, and digital da'wah content that appeals to the younger generation (Erwan et al., 2023). Research indicates that digital media-based learning can enhance pupils' participation and understanding of moral values, despite facing challenges such as limited facilities, a lack of teacher competence, and minimal parental support (Yajie et al., 2023). Thus, the main challenge lies not in the technology itself, but in how to design systemic, holistic and sustainable implementation strategies to optimise the positive potential of technology whilst mitigating its negative risks.

Recommended implementation strategies include digital training and the provision of infrastructure, peer mentoring amongst teachers, advocacy for digital ethics, and periodic evaluation of teacher and pupil behaviour in digital spaces (Sholeh et al., 2025). The implementation mechanism for this curriculum involves six main stages: (1) curriculum design that integrates Islamic Education (PAI) and digital competences; (2) teacher training in TPACK (Technological Pedagogical Content Knowledge) and the development of professional learning communities; (3) contextualisation of materials to suit local school conditions; (4) the provision of resources such as a Learning Management System (LMS) and digital content; (5) a blended learning system combining face-to-face and online

learning; and (6) periodic evaluation involving teachers and parents (Ismatullah, 2019). This approach requires a collective commitment from education stakeholders, ranging from policymakers, school administrators and teachers to parents.

However, various obstacles are still encountered in the implementation of digital ethics education, such as the digital access and literacy gap between urban and rural areas, changes in the nature of the educational relationship between teachers and pupils, and cultural resistance to the shift from traditional to digital methods. Limited technological resources, particularly in rural areas and among families with limited economic means, pose a serious problem that hinders equitable access to high-quality digital learning (Trisnawati et al., 2025). Furthermore, challenges in the internalisation of values, the high potential for digital distractions, and the limited availability of content aligned with Islamic teachings also present obstacles that need to be addressed through innovation and multi-stakeholder collaboration (Harahap et al., 2023).

In the Indonesian context, these challenges are further complicated by cultural diversity, varying levels of digital literacy, and socio-political dynamics that influence the educational ecosystem. Therefore, strengthening Islamic character in Islamic Education (PAI) amidst technological disruption requires an approach that is contextual, adaptive, and sensitive to local realities, without compromising the universal Islamic principles of morals and ethics. This article aims to critically analyse the implementation of digital ethics and moral education in PAI lessons in schools, as well as to identify strategies for strengthening Islamic character that are relevant to the context of technological disruption in Indonesia.

Research Method

This study employs a literature review using a qualitative-descriptive approach, in which data were collected through the search, identification, analysis, and synthesis of various academic literature sources relevant to the theme of strengthening Islamic character in Islamic Religious Education (PAI) amidst technological disruption. Primary data sources include national and international journal articles, books, and other documents. Data analysis was conducted using content analysis, comprising the stages of data reduction, data presentation, and drawing conclusions to construct a comprehensive understanding of the implementation of digital ethics and moral education, the challenges faced, and effective strategies for strengthening Islamic character within the context of IRE learning in schools (Walliman and Walliman, 2021); (Eliyah and Aslan, 2025).

Results and Discussion

Implementation of Digital Ethics and Morality Education in Islamic Religious Education

The implementation of digital ethics and moral education in Islamic Religious Education (PAI) requires a comprehensive, systematic and integrated approach across various dimensions of learning, ranging from curriculum planning, the selection of media and teaching methods, to the assessment of pupils' behaviour in the digital space. In the

context of the Society 5.0 era, digital literacy in Akidah Akhlak education must encompass four main dimensions, namely the cognitive dimension (conceptual understanding), technical (skills in using technology), ethical (moral awareness), and spiritual (transcendental awareness), with a digital project-based learning approach serving as an effective strategy for internalising moral values in real-world practice (Sumiati, 2020). This multidimensional approach ensures that learners are not only technically proficient but also possess a strong moral and spiritual foundation in navigating the complexities of the digital space.

At the curricular level, the implementation of digital ethics education is carried out through the integration of digital literacy and Islamic ethics into core subjects; this is not limited to Islamic Education (PAI) but also extends to general subjects such as Information and Communication Technology (ICT), which teaches how to create digital content whilst also covering the ethics of citing sources to avoid plagiarism and *gharar* (uncertainty) in a digital context (Sitepu et al., 2022). Islamic Education (PAI) subjects, particularly Aqidah-Akhlak, Fiqh, and Al-Qur'an-Hadith, serve as strategic vehicles for instilling values such as honesty (*siddiq*), responsibility (*amanah*), verification of information (*tabayyun*), and preserving honour (*iffah*) in digital interactions. Furthermore, madrasahs and Islamic schools have developed specialised modules on digital ethics (*adab al-internet*) drawn from contemporary fiqh studies on digital *muamalah*, so that pupils have clear normative guidance when interacting in virtual spaces (Safitri et al., 2025).

The integration of moral values into digital media-based Islamic Education (PAI) can be achieved through several complementary approaches. Firstly, integration through lesson planning, whereby PAI teachers need to formulate learning objectives that not only emphasise cognitive aspects but also explicitly incorporate the ethical values to be instilled, such as honesty when answering online questions, respecting peers' opinions in online discussions, or maintaining proper etiquette when commenting on social media (Nasution, 2024). These values are then integrated into teaching materials, learning activities and assessment tools, so that character development becomes an integral part of the learning process, rather than merely an add-on or a side effect expected to arise automatically.

Secondly, integration through digital media content, whereby the learning materials used—such as videos, animations, interactive modules, or e-learning platforms—must contain moral messages aligned with Islamic values, such as stories of the exemplary conduct of the Prophet and his companions in a contemporary context, illustrations of the consequences of ongoing sin (*dosa jariyah*) in spreading hoaxes, or inspirational testimonials on the benefits of technology for the good of the ummah (Ismatullah, 2019). Well-designed digital content not only conveys information but also touches the heart and inspires action, thereby encouraging learners to emulate the positive values portrayed in such media. The selection of ethical and educational digital media is key to the success of this approach, as content that is inconsistent with Islamic values can, in fact, become a source of moral degradation.

Thirdly, integration through participatory learning methods, in which digital media are utilised to support online discussions, collaborative projects, and reflective tasks focused on character development, such as creating anti-misinformation campaigns on social media, designing infographics on Islamic digital ethics, or producing short videos on internet etiquette in accordance with Islamic guidance (Ismaniya and Rofiq, 2025). This method enables pupils to learn actively, critically and creatively, whilst honing their digital collaboration and communication skills, which are essential competencies in the 4.0 era. Thus, technology serves not only as a learning aid but also as a platform for hands-on practice to internalise moral values in a real-world context.

At the institutional level, schools and madrasahs establish clear and educational policies regarding the use of mobile devices, whereby an effective policy is not a total ban, but the implementation of ‘smart hours’ and ‘device-free zones’ in specific areas such as prayer rooms, libraries and examination halls to foster awareness of the limits of technology use in the contexts of worship and academic study (Darmawan and Sagita, 2026). Madrasahs are also actively building a safe digital ecosystem, such as providing Wi-Fi with filters to block harmful content, creating an internal learning platform (Learning Management System/LMS) that serves as a safe space for student expression, and implementing an internet usage monitoring system to detect potential breaches of digital ethics at an early stage. These institutional policies create an environment conducive to the consistent and sustainable internalisation of digital ethical values.

The implementation strategy for digital ethics education also includes the use of digital communication platforms for daily ethical guidance, such as utilising class WhatsApp groups to send moral coaching videos, daily Islamic quotations, and programmes for students to reflect on their behaviour through digital journals documented on a regular basis (Apriyani et al., 2025). Teachers utilise digital media such as Islamic educational videos, religious-themed multimedia presentations, digital Qur’an applications, and online learning platforms to instil moral values, discipline, and responsibility in everyday interactions (Annisya and Resty, 2025). These digital platforms serve as effective channels of communication to strengthen teacher-pupil relationships and create a mutually supportive learning community for character development.

In terms of setting a good example, PAI teachers must be able to utilise social media positively and act as good role models (digital *uswah hasanah*) for pupils. Before teaching pupils about digital ethics, teachers need to demonstrate directly how to use social media wisely, such as creating positive content, responding to criticism politely, and sharing accurate information via their personal accounts (Al-hasnah et al., 2026). This exemplary behaviour can be demonstrated through the use of polite language in school communication groups, a courteous attitude when responding on social media, and avoiding the dissemination of content that contradicts Islamic values. Without such exemplary behaviour, digital ethics education will merely be rhetoric without any transformative impact on pupils’ behaviour.

One successful concrete implementation is the use of a learning contract as a guide to digital ethics at the start of the term, which sets out a code of conduct for behaviour in the digital space, including a ban on spreading hate speech, respecting peers' privacy, and not misusing learning platforms for non-academic purposes (Ramadhan, 2023). This learning contract is signed by pupils, teachers and parents as a form of shared commitment to creating a digitally ethical ecosystem, and serves as the basis for disciplinary action in the event of a breach. This approach provides clarity on norms and consequences, ensuring pupils have clear guidance on how to behave in the digital space.

The implementation of digital ethics education within the Akidah Akhlak curriculum also requires innovative and contextual learning strategies, such as case-based learning that addresses contemporary digital phenomena, the use of digital media as interactive learning tools, and interactive discussions on ethical challenges in the era of AI, deepfakes, and social media algorithms (Nola et al., 2025). This strategy enables learners to develop critical, analytical and reflective thinking skills in addressing digital ethical dilemmas, whilst strengthening their understanding of the relevance of Islamic values in the contemporary context. Thus, learning is not merely theoretical, but also practical and responsive to social realities.

At the social-collaborative level, digital ethics education cannot be undertaken by schools alone, so madrasahs establish strategic partnerships with parents through the 'Raising Children in the Digital Age' parenting workshop, digital school communities that connect education stakeholders virtually, digital community forums involving religious and community leaders, and cross-sectoral programmes that integrate the efforts of various parties to strengthen an ethical digital ecosystem (Setyaningsih et al., 2025). Collaboration with parents takes place through school communication groups and parenting sessions to align the values taught at school with practices at home, so that pupils do not experience a dissonance of values between these two environments, which should ideally reinforce one another.

The model of Islamic moral education developed for the post-digital era is Digital Spiritual Consciousness-Based Islamic Moral Education (PAI-DSC), comprising a philosophical-theological foundation, a pedagogical-psychological framework, a digital moral curriculum, transformative learning strategies, and a holistic supporting ecosystem (Saputra et al., 2024). This model emphasises a shift from an instructional approach to a transformative approach that emphasises digital spiritual awareness, whereby learners are not only taught what is right and wrong, but are also guided to develop a transcendental awareness that all their digital activities are observed by Allah and have consequences in the hereafter. This approach results in a deeper and more sustainable internalisation of values.

The implementation of the collaborative model is also carried out through a digital role model programme involving positive influencers from among pupils, teachers and community leaders to serve as collective role models in the ethical use of technology, as well as the documentation and dissemination of best practices in utilising technology for

the benefit of the community via widely accessible digital platforms (Hermawan et al., 2023). The development of inspirational content showcasing digital role models—such as stories of pupils using social media for religious outreach, teachers innovating in digital learning, or communities actively involved in anti-misinformation campaigns—is an effective strategy for reinforcing positive social norms and fostering a digitally ethical culture within the school environment.

Overall, the implementation of digital ethics and moral education within Islamic Education (PAI) requires synergy between institutional policies, teacher competence, parental involvement, and active student participation in creating a digital ecosystem grounded in Islamic values. Through a comprehensive, holistic and sustainable approach, PAI education can be transformed from merely the transfer of religious knowledge into a vehicle for character building that equips learners with digital competences and ethical awareness to become responsible digital citizens of noble character who contribute positively to society in this era of technological disruption.

A Critical Analysis of the Challenges and Strategies for Strengthening Islamic Character

The first and most fundamental challenge in strengthening Islamic character in the era of technological disruption is the low level of digital literacy among PAI teachers, which, according to national research, remains in the moderate to basic category, with the main obstacles including limited training, disparities in digital infrastructure, and a lack of integrated policy support (Wahyudi et al., 2025). PAI teachers' digital literacy competencies significantly influence their ability to cope with digital change, and based on field findings in various Islamic schools, the majority of teachers still face difficulties in mastering the digital technologies required for online learning, such as managing e-learning platforms, creating digital content, and utilising interactive media (Sulastri et al., 2023). The low level of digital literacy among PAI teachers is a major obstacle to the implementation of technology-based learning; consequently, a curriculum that emphasises the integration of technology has not yet been implemented optimally as it is not in line with teachers' readiness.

This digital skills gap is exacerbated by a lack of ongoing training, limited school facilities, insufficient support from education policy, and a teaching culture that remains conventional, making Islamic Education (PAI) teachers reluctant or unable to adapt to the paradigm shift towards learning (Safrudin and Sesmiarni, 2022). Curricula emphasising technology integration, such as the Merdeka Curriculum in the Society 5.0 era, have not yet been optimally implemented as they are not aligned with teachers' readiness, resulting in a gap between policy expectations and on-the-ground realities. Some teachers lack adequate digital literacy skills, making it difficult for them to design technology-based learning effectively, which ultimately hinders the internalisation of Islamic character values through digital media.

The second challenge is technological distraction, which presents numerous disruptions—such as social media, online games and other entertainment applications—

that can divert pupils' attention away from learning activities and character development (Hasniati et al., 2025). Exposure to negative content, easy access to unfiltered information, and lifestyles that do not always align with Islamic principles are dynamics that can influence the internalisation of Islamic values among the younger generation (Zahira et al., 2025). The ease of accessing information via the internet and social media can have a negative impact on pupils' character, including exposure to pornographic content, violence, radicalism and materialism, which contradict the Islamic values taught in schools.

Cyberbullying and negative online behaviour are serious issues that can damage pupils' mental and emotional health, as well as significantly affecting their character development. Without a strong foundation in character development, pupils are vulnerable to negative influences such as digital narcissism, cyberbullying, and consumerism, which are becoming increasingly prevalent in the virtual space (Fitri and Ridwan, 2024). Excessive use of gadgets tends to encourage individualistic attitudes, a decline in empathy, and a weakening of face-to-face social skills, which in turn hinders the process of internalising moral values that require authentic and meaningful social interaction.

The third challenge is a lack of supervision and guidance from parents and teachers regarding the use of digital technology, which can expose pupils to content and interactions that do not support the development of good character (Suhartono and Yulietta, 2019). The problems faced in Islamic character education in the digital age include a lack of parental and teacher control over children's use of digital technology, the spread of inaccurate and unethical information via social media, and a lack of integration of Islamic values into the educational curriculum (Zahira et al., 2025). The lack of digital supervision also exacerbates the situation, as parents and teachers often find it difficult to monitor pupils' online activities effectively, particularly when children have personal devices that are inaccessible to parents.

Technology addiction is also a serious issue, as spending too much time online can disrupt the process of internalising moral values and reduce the time available for religious practice, study and healthy social interaction. There is a risk of technology misuse that can affect pupils' morality and behaviour, such as social media addiction, the spread of hoaxes, and a tendency to neglect religious values in daily life (Rahmawati et al., 2025). The crisis of role models in the media also poses a challenge, as public figures on social media often fail to demonstrate behaviour worthy of emulation, causing students to lose role models they can look up to in terms of digital ethics.

On the other hand, the era of technological disruption also presents a significant opportunity for the strengthening of Islamic character, where digital technology can be utilised as an effective tool in supporting the internalisation of Islamic character values through various learning media, such as educational videos, online learning platforms, and interactive applications (Wicaksono, 2021). The integration of Islamic Education (PAI) and Information and Communication Technology (ICT) has been implemented through digital project-based learning, teachers setting a good example, and collaboration between

schools and parents in monitoring pupils' digital behaviour, which conceptually represents an adaptive model of Islamic education that harmonises technological progress with moral values. This synergy between Islamic Education (PAI) and ICT- s contributes to developing a generation that is digitally literate yet remains ethical and of good character in the Society 5.0 era.

The first strategy for strengthening Islamic character is the integration of Islamic values into digital learning, whereby PAI teachers need to design lessons that explicitly integrate moral values into every technology-based activity, such as incorporating moral reflection into online assignments, providing character-building feedback, and creating an Islamic digital culture in virtual classrooms (Salisah et al., 2024). Islamic Education (PAI) teaching that remains cognitively oriented is not yet fully effective in internalising moral values within a digital context; therefore, innovative strategies are required in the form of integrating religious digital literacy, which not only teaches technical skills but also fosters ethical and spiritual awareness in the use of technology (Ramadhan, 2023). This approach ensures that technology serves as a vehicle for the transformation of values, rather than merely a tool for the transfer of information.

The second strategy is to strengthen teachers' role modelling in the digital space, whereby PAI teachers must be able to serve as digital role models by demonstrating ethical behaviour in the use of social media, such as creating positive content, responding to criticism politely, and disseminating accurate information through their personal accounts. Teachers' exemplary behaviour and digital ethics have been shown to strengthen pupils' religious character, moral responsibility and critical thinking when utilising digital technology (Putro, 2022). Without such exemplary behaviour, digital ethics education will remain mere rhetoric without any transformative impact on pupils' behaviour, as children learn more from what they see than from what they hear.

The third strategy is the strengthening of digital literacy based on Islamic values, which encompasses cognitive (conceptual understanding), technical (practical skills), ethical (moral awareness) and spiritual (transcendental awareness) dimensions, so that pupils are not only technically proficient but also possess a strong moral and spiritual foundation (Puspitasari et al., 2022). Digital literacy is a key innovation in Islamic Education (PAI) that encompasses critical thinking, the ethical use of technology, and the productive utilisation of digital resources; however, there remains a digital skills gap amongst teachers and pupils that hinders the implementation of technology-based learning in schools (Nurazizah et al., 2022). Digital literacy development models such as INSTANT have been designed as a solution to improve the digital literacy and professional competence of PAI teachers, and have been proven to be valid and effective based on expert reviews and field trials.

The fourth strategy involves collaboration between schools and parents in fostering a digitally ethical ecosystem, whereby madrasahs establish strategic partnerships through 'Raising Children in the Digital Age' parenting workshops, digital school communities, digital community forums, and cross-sectoral programmes that

integrate the efforts of various stakeholders (Noor and Damariswara, 2022). Synergy between schools and families is essential because character education in the digital age faces a range of complex challenges, including the negative influence of social media, a decline in face-to-face social interaction, and a lack of control over the digital content consumed by pupils. This collaboration can be achieved through school communication groups, parenting sessions to align the values taught at school with practices at home, and a joint monitoring system to detect potential breaches of digital ethics at an early stage.

The fifth strategy is a reflective-dialogic learning approach that emphasises critical discussion of digital ethical dilemmas, analysis of contemporary case studies, and personal reflection on the relationship between technology and spirituality, thereby enabling learners to develop critical thinking skills and a deep sense of moral awareness (Muhalli, 2023). The transformation of Islamic Education (PAI) strategies to become more contextual and adaptive is an urgent necessity so that religious education can serve as an agent in shaping the character of the digital generation—one that is faithful, critical and of integrity. This approach enables learners not only to memorise norms, but also to understand the rationale and relevance of Islamic values in confronting the complexities of the digital space.

Overall, the challenges and opportunities for strengthening Islamic character in the era of technological disruption require a systemic, holistic and sustainable response, involving synergy between enhancing teacher competence, strengthening infrastructure, multi-stakeholder collaboration, and pedagogical transformation oriented towards character building. Through the implementation of a comprehensive strategy, Islamic Education (PAI) can be transformed from merely the transfer of religious knowledge into a vehicle for character development that equips pupils with digital competences and ethical awareness to become responsible digital citizens of noble character who make a positive contribution to society in this era of technological disruption.

Conclusion

Strengthening Islamic character in Islamic Religious Education (PAI) amidst technological disruption requires a comprehensive and integrated approach, in which moral education and digital ethics cannot be separated from the day-to-day learning process. The implementation of digital ethics education within PAI has demonstrated various effective models, such as the integration of Islamic values into technology-based learning, teachers serving as exemplary digital role models (*uswah hasanah*), the use of digital media for daily moral guidance, and strategic collaboration between schools and parents in creating a digital ecosystem grounded in Islamic values. However, this implementation still faces significant challenges, including low digital literacy among PAI teachers, technological distractions that divert pupils' attention from learning activities, a lack of supervision from parents and teachers, and exposure to negative content that can undermine pupils' character development.

These challenges call for a systematic and multidimensional strategy to strengthen Islamic character, encompassing the integration of Islamic values into every digital learning activity, reinforcing teachers' role as role models in the digital space, developing digital literacy grounded in Islamic values that covers cognitive, technical, ethical and spiritual dimensions, and close collaboration between schools and families in shaping a morally sound digital ecosystem. A reflective-dialogic learning approach that emphasises critical discussion of digital ethical dilemmas and the analysis of contemporary case studies has also proven effective in developing students' critical thinking skills and moral awareness. Thus, technology serves not only as a learning aid but also as a platform for direct practice in internalising moral values within the real-life context of digital life.

Overall, the strengthening of Islamic character in Islamic Education (PAI) in the era of technological disruption is not merely a technical adaptation to digital progress, but rather a pedagogical transformation that places Islamic values at the foundation of every digital interaction. The success of this endeavour requires a collective commitment from all education stakeholders—ranging from policymakers, school administrators, teachers and parents to the wider community—to create a digital ecosystem conducive to shaping a generation of Muslims who are technologically literate, possess noble moral character and act ethically in navigating the complexities of the digital space in the Society 5.0 era.

References

- Al-hasnah, H.S., Hodijah, I., Maulana, H., 2026. Digital Akhlak: Menanamkan Etika Bermedia Sosial dalam Frame Pendidikan Agama Islam. *Hikmah J. Studi Pendidik. Agama Islam* 3, 13–22.
- Annisya, S.M., Resty, G.G., 2025. Pembentukan Karakter Generasi Muda Yang Berakhlak Islami ala Manajemen Pendidikan Pesantren. *J. Studi Pesantren* 5, 28–37. <https://doi.org/10.35897/studipesantren.v5i1.1546>
- Anwar, C., Marlina, L., Maya, R., 2026. Etika Digital Perspektif Al – Qur'an dan Hadits Tarbawi Serta Implementasinya Dalam Kehidupan. *Amorti J. Studi Islam Interdisip.* 85–101. <https://doi.org/10.59944/amorti.v5i1.1040>
- Apriyani, A., Dewi, N.S.D., Ramadhani, A.P., Farhurohman, O., 2025. STRATEGI GURU DALAM MENANAMKAN NILAI AKHLAKUL KARIMAH MELALUI PEMBELAJARAN AKIDAH AKHLAK DI MADRASAH IBTIDAIYAH: Strategi Efektif Guru Dalam menanamkan Nilai Akhlakul Karimah Siswa melalui Pembelajaran Akidah Akhlak. *Ebtida J. Pendidik. Dasar Islam* 5, 543–554. <https://doi.org/10.33379/ebtida.v5i1.7150>
- Aslan, 2019. Pergeseran Nilai Di Masyarakat Perbatasan (Studi tentang Pendidikan dan Perubahan Sosial di Desa Temajuk Kalimantan Barat) [WWW Document]. URL <https://idr.uin-antasari.ac.id/10997/> (accessed 5.11.20).
- Darmawan, D., Sagita, I.N., 2026. Keselarasan Pendidikan Akhlak dan Ekspresi Kreatif Digital Peserta Didik Madrasah. *Educ. J. Ilm. Ilmu Pendidik.* 6, 388–412. <https://doi.org/10.36312/educatoria.v6i2.1253>
- Eliyah, E., Aslan, A., 2025. STAKE'S EVALUATION MODEL: METODE PENELITIAN. *Pros. Semin. Nas. Indones.* 3, 117–129.

- Erwan, E., Aslan, A., Asyura, M., 2023. INTERNALISASI BUDAYA RELIGIUS OLEH GURU AKIDAH AKHLAK UNTUK MENUMBUHKAN SIKAP AKHLAK MULIA DI MIS BINA DHARMA PARIT RABU. *J. Pendidik. DAN Kegur.* 1, 488–496.
- Fitri, R.L., Ridwan, A., 2024. Pendidikan Akhlak di Era Digital: Pengaruh Konten Islami di Instagram Terhadap Pembentukan Karakter Remaja dalam Perspektif Sosial. *Soc. Stud. Educ.* 2, 157–172. <https://doi.org/10.15642/sse.2024.2.2.157-172>
- Harahap, M.A.K., Haryanto, H., Lestari, V.L., R, R., Munandar, H., 2023. Pemanfaatan Teknologi Artificial Intelligences (AI) Bagi Dosen Dalam Menghadapi Tantangan Perguruan Tinggi Pada Era Disrupsi. *Innov. J. Soc. Sci. Res.* 3, 10566–10576.
- Hasniati, Mashfufah, K., Alfirdo, T., Sari, H.P., 2025. Tantangan Dan Strategi Dalam Pendidikan Karakteristik Islam di Era Digital. *IHSAN J. Pendidik. Islam* 3, 349–358. <https://doi.org/10.61104/ihsan.v3i2.932>
- Hermawan, A.R., Azizah, A.R.N., Mardiyah, M., Caturian, M.F., 2023. Warisan Ibnu Miskawaih Revitalisasi Pendidikan Akhlak Islam di Era Digital. *Al-Tarbawi Al-Haditsah J. Pendidik. Islam* 8. <https://doi.org/10.24235/tarbawi.v8i1.13853>
- Ismaniya, F.Z., Rofiq, M.N., 2025. Strategi Guru PAI dalam Menanamkan Nilai Akhlakul Karimah pada Generasi Z di MTs Sunan Ampel Menampu Kabupaten Jember. *DIMAR J. Pendidik. Islam* 6, 331–346. <https://doi.org/10.58577/dimar.v6i2.414>
- Ismatullah, N.H., 2019. Internalisasi Nilai-Nilai Keislaman dalam Membangun Karakter Akhlakul Karimah Siswa. *Tarbiyatu Wa Ta39lim* 1, 59–73.
- Muhalli, M., 2023. STRATEGI OPTIMALISASI PENDIDIKAN ISLAM DALAM MEMBENTUK KARAKTER ISLAMIS PADA MAHASISWA GENERASI Z. *Attaqwa J. Ilmu Pendidik. Islam* 19, 307–315. <https://doi.org/10.54069/attaqwa.v19i2.452>
- Nasution, A.R.A.A., 2024. Efektivitas Pembelajaran Pendidikan Agama Islam (PAI) Dalam Membentuk Akhlak Mulia Pada Siswa: Studi Kasus di SMP PAB 15 Medan. *Socius J. Penelit. Ilmu-Ilmu Sos.* 2, 45–48. <https://doi.org/10.5281/zenodo.13906442>
- Nola, I., Alya, M., Shandi, R.M., 2025. Pendidikan Akhlak Siswa di Era Digitalisasi. *J. MULTIDISIPLIN ILMU Akad.* 2, 301–306. <https://doi.org/10.61722/jmia.v2i3.4751>
- Noor, D.N.F., Damariswara, R., 2022. Peran Media Sosial dan Keluarga dalam Pembentukan Karakter Santun Anak Usia Sekolah Dasar. *PTK J. Tindakan Kelas* 3, 39–47. <https://doi.org/10.53624/ptk.v3i1.105>
- Nurazizah, A., Rukajat, A., Ramdhani, K., 2022. PERAN PENDIDIKAN AGAMA ISLAM DALAM MEMBENTUK KARAKTER SISWA DI ERA MILENIAL. *PeTeKa* 5, 361–372. <https://doi.org/10.31604/ptk.v5i3.361-372>
- Puspitasari, N., R, L.R., Yusuf, R., 2022. PERAN PENDIDIKAN AGAMA ISLAM TERHADAP PEMBENTUKAN KARAKTER RELIGIUS PESERTA DIDIK. *Attadib J. Pendidik. Agama Islam* 3, 57–68. <https://doi.org/10.30863/attadib.v3i1.2565>
- Putra, P., Aslan, 2020. PENGEMBANGAN BAHAN AJAR BERBASIS IMTAQ DAN IPTEK DI ERA REVOLUSI INDUSTRI 4.0 PADA MATA PELAJARAN SAINS MADRASAH IBTIDAIYAH. *TaLimuna J. Pendidik. Islam* 9, 1–15. <https://doi.org/10.32478/talimuna.v9i1.345>
- Putra, P., Mizani, H., Basir, A., Muflihini, A., Aslan, A., 2020. The Relevancy on Education Release Revolution 4.0 in Islamic Basic Education Perspective in Indonesia (An Analysis Study of Paulo Freire's Thought). *Test Eng. Manag.* 83, 10256–10263.
- Putro, S.R.S., 2022. Pembentukan Karakter Melalui Pendidikan Agama Islam. *Syntax Lit. J. Ilm. Indones.* 7, 17604–17618. <https://doi.org/10.36418/syntax-literate.v7i12.10673>

- Rahmawati, A., Amirah, S.N., Wijaya, N., 2025. Integrasi Kecerdasan Buatan dalam Pendidikan Tinggi Indonesia: Peluang, Tantangan, dan Kerangka Implementasi. *J. Teknol. Sist. Inf.* 6, 114–126. <https://doi.org/10.35957/jtsi.v6i1.11329>
- Ramadhan, A.I., 2023. Pendidikan Akhlak dalam Pembentukan Karakter Anak di Era Digital 8, 14–23.
- Safitri, E.N., Baharudin, B., Susilawati, B., Hasanah, U., Wahyudi, W.E., 2025. OPTIMALISASI PENDIDIKAN AKHLAK BERBASIS TADZKIYATUN NAFS. *Ilmuna J. Studi Pendidik. Agama Islam* 7, 1–17. <https://doi.org/10.54437/ilmuna.v7i1.1935>
- Safrudin, S., Sesmiarni, Z., 2022. Profesional Guru Pendidikan Agama Islam (PAI) Dalam Meningkatkan Literasi Di Era Digital. *J. Kaji. Ilmu Pendidik. JKIP* 3, 43–53. <https://doi.org/10.55583/jkip.v3i1.308>
- Salisah, S.K., Darmiyanti, A., Arifudin, Y.F., 2024. Peran Pendidikan Agama Islam dalam Membentuk Karakter Peserta Didik di Era Digital Tinjauan Literatur. *Al-Fikr J. Pendidik. Islam* 10, 36–42. <https://doi.org/10.47945/alfikr.v10i1.378>
- Saputra, H., Usman, S., Sakka, A.R., Aslan, A., 2024. The Effect Of Using Learning Media On Learning Motivation About Creed and Morals At Mas Ushuluddin Singkawang. *IJGIE Int. J. Grad. Islam. Educ.* 6, 124–135. <https://doi.org/10.37567/ijgie.v6i1.3698>
- Setyaningsih, D., Mamma, A.T., Olua, E., Sirjon, S., 2025. The Impact of Authoritative Parenting Patterns on the Social-Emotional Development of Early Childhood in Indonesia. *World Psychol.* 4, 112–122. <https://doi.org/10.55849/wp.v4i1.808>
- Sholeh, M. Ibnu, Mohamed, M.R.A.A., Nur 'Azah, Munif, M., Haris, M., 2025. Digital Leadership Impact on Organizational Culture and Learning Innovation in Islamic Education. *Int. J. Multidiscip. Res. Innov.* 1, 1–22. <https://doi.org/10.64084/ijmri.v1i1.44>
- Sitepu, M.S., Maarif, M.A., Basir, A., Aslan, A., Pranata, A., 2022. Implementation of Online Learning in Aqidah Akhlak Lessons. *AL-ISHLAH J. Pendidik.* 14, 109–118. <https://doi.org/10.35445/alishlah.v14i1.1401>
- Sofyana, N.L., Haryanto, B., 2023. MENYOAL DEGRADASI MORAL SEBAGAI DAMPAK DARI ERA DIGITAL. *J. Manaj. Dan Pendidik. Islam* 3, 223–235.
- Suhartono, S., Yulietta, N.R., 2019. PENDIDIKAN AKHLAK ANAK DI ERA DIGITAL. *Turots J. Pendidik. Islam* 36–53. <https://doi.org/10.51468/jpi.v1i2.9>
- Sulastri, S., Aslan, A., Rathomi, A., 2023. STRATEGI GURU PENDIDIKAN AGAMA ISLAM DALAM PENYAMPAIAN MATERI PADA ANAK TUNAGRAHITA DI SEKOLAH LUAR BIASA NEGERI SAMBAS TAHUN PELAJARAN 2022/2023. *Lunggi J. Literasi Unggulan Ilm. Multidisipliner* 1, 571 – 583.
- Sumiati, 2020. Penerapan Metode Discovery Learning Dalam Meningkatkan Hasil Belajar Materi Menghindari Akhlak Tercela (Hasad, Dendam, Ghibah, Fitnah Dan Namimah) Pada Siswa Kelas VII MTs Al Kautsar Kota Banjar. *Al-Minhaj J. Pendidik. Islam* 2, 113–124.
- Trisnawati, T.E., Defriani, D., Sari, H.P., 2025. Reorientasi Pendidikan Islam dalam Menghadapi Disrupsi Teknologi Era Industri 4.0 dan Society 5.0. *EL-BANAT J. Pemikir. Dan Pendidik. Islam* 15, 855–869. <https://doi.org/10.54180/elbanat.2025.15.2.855-869>
- Untari, D.T., Satria, B., Prasajo, Khasanah, F.N., Sukreni, T., 2025. Keluarga Digital Cerdas: Kolaborasi Orang Tua dan Sekolah dalam Literasi Digital Anak. *J. Pengabd. Masy. Dan Ris. Pendidik.* 4, 1345–1352. <https://doi.org/10.31004/jerkin.v4i1.1587>

- Utami, P., Amirudin, A., Setiawan, D., Muslimin, A., Jaenullah, J., 2024. Peran Guru PAI Dalam Meningkatkan Akhlak Siswa di SDN 20 Negerikaton Kabupaten Pesawaran. *Assyfa J. Islam. Stud.* 2, 47–52. <https://doi.org/10.61650/ajis.v2i1.539>
- Wahyudi, E., W, N.M.R., Nanda, N., 2025. Strategi Peningkatan Literasi Digital Guru Dalam Menghadapi Transformasi Pendidikan 4.0. *Satya Sastraharing J. Manaj.* 9, 175–189. <https://doi.org/10.33363/satya-sastraharing.v9i1.1470>
- Walliman, N., Walliman, N., 2021. *Research Methods: The Basics*, 3rd ed. Routledge, London. <https://doi.org/10.4324/9781003141693>
- Wicaksono, B.W., 2021. Peran Pendidikan Agama Islam dalam Membangun Karakter Mahasiswa di Era Milenial. *Tarbiyatu Wa Ta39lim* 3, 1–9.
- Widjaja, G., Aslan, A., 2022. Blended Learning Method in The View of Learning and Teaching Strategy in Geography Study Programs in Higher Education. *Nazhruna J. Pendidik. Islam* 5, 22–36. <https://doi.org/10.31538/nzh.v5i1.1852>
- Yajie, L., Liu, H., Gaoming, M., 2023. Widening Digital Divide: Family Investment, Digital Learning, and Educational Performance of Chinese High School Students During the COVID-19 Pandemic School Closures. *Appl. Res. Qual. Life* 18, 2397–2413. <https://doi.org/10.1007/s11482-023-10191-y>
- Yanti, R.E., Aslan, A., Multahada, A., 2022. PERSEPSI SISWA PADA PENDIDIKAN NILAI DI SEKOLAH DASAR TARBIYATUL ISLAM SAMBAS. *ADIBA J. Educ.* 2, 429–440.
- Zahira, A.N., Putri, F.N., Indah, W.O.N.T., Dinayah, E.I., Rasi'in, R., 2025. Mengatasi Tantangan Pendidikan Akhlak Anak Usia Dini di Era Digital. *Tinta Emas J. Pendidik. Islam Anak Usia Dini* 4, 131–146. <https://doi.org/10.35878/tintaemas.v4i2.1759>