Islamic Education Management, Sufism, and Digital Literacy: An Interdisciplinary Approach

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ABSTRACT: This article aims to examine the interdisciplinary relationship between Islamic education management, Sufism, and digital literacy in addressing the challenges of 21st-century education. Islamic education serves not only as a medium for knowledge transfer but also as a vehicle for character formation and spiritual development. Sufism, with its emphasis on inner dimensions, ethics, and transcendental awareness, provides an ethical and spiritual framework highly relevant in the era of digital disruption. Meanwhile, digital literacy has become an urgent competency for learners to adapt to the global flow of information while filtering hoaxes, hate speech, and harmful content. This study employs a qualitative approach through library research, drawing upon authoritative books, peer-reviewed journals, and international reports. The findings reveal that integrating Islamic education management with Sufi values and digital literacy fosters an educational model that is humanistic, spiritual, and technologically adaptive. Case studies from madrasahs, pesantrens, and Islamic higher education institutions demonstrate that this integrative model enhances learning effectiveness, strengthens digital ethics, and nurtures religious character relevant to the digital age. Nevertheless, this research has limitations due to the lack of empirical field data, meaning the findings are still conceptual and require testing through qualitative or quantitative research in Islamic educational institutions. Further studies are expected to develop more applicable instruments and implementation models for administrators and educators. This article concludes that the integration of Sufism, Islamic education management, and digital literacy forms a strategic foundation for cultivating Indonesia's golden generation one that is character-driven, intellectually capable, and globally competitive.

Keywords: Islamic education management, Sufism, digital literacy, interdisciplinary, golden generation.

I. INTRODUCTION

The acceleration of digital transformation has changed the learning ecosystem, institutional governance, and the way Muslim students interact with knowledge and religious authority. Unlimited access to information, a participatory culture, and the algorithmizing of attention create a paradox: on one hand, the opportunity for the democratization of knowledge; on the other, a flood of information, disinformation, mis/disinformation, and the erosion of attention and academic decorum in the digital space [1–4]. This challenge requires a conceptual and managerial response that is not merely technical but rooted in a vision of Islamic education that integrates the dimensions of intellect, character, and spirituality an orientation that has long been a characteristic of classical Islamic education towards *insān kāmil* [5–7]

It is within this framework that Islamic education management based on an interdisciplinary approach is proposed: collaborating modern education management theory, the ethical-spiritual wisdom of Sufism, and

critical digital literacy competencies. This approach is not intended as a "pasting" of three independent domains, but rather an epistemic and practical integration that explains one another. At the philosophical level, Sufism provides the educational purpose (*telos*): *tazkiyat al-nafs*, *adab*, and *ihsan* [8–11]. At the strategic level, management science provides tools for planning, organizing, leadership, and evaluation including data governance, quality assurance, and a culture of continuous improvement [12–15]. At the competency level, digital literacy enables students and educators to ethically search, evaluate, produce, and participate in the digital knowledge ecosystem [16–20].

Cross-disciplinary research shows that "digital literacy" is not sufficiently understood as operational proficiency (clicking, uploading, downloading). It encompasses cognitive-cross-contextual skills: evaluating source credibility, understanding representation, and making sense of the socio-technological networks where information circulates [16, 17]. Eshet-Alkalai, for example, formulated a digital literacy framework that requires cognitive, photo visual, reproductive, informational, and socio-emotional skills [18]. In an educational context, Selwyn warns against the "solutionism" trap believing that technology automatically improves learning without considering the politics of infrastructure, access gaps, and pedagogical practices [19]. The participatory culture celebrated by Jenkins brings opportunities for collaboration and peer learning, but at the same time demands new literacy regarding authority, copyright, and the ecology of attention [20].

In the digital public space, the definition and genealogy of "fake news" were mapped by Tandoc et al., showing various modes (parody, propaganda, content manipulation) that require a curriculum of verification, lateral reading, and sharing ethics [3]. These findings are relevant for *madrasah/pesantren* (Islamic boarding schools) and Islamic Religious Education study programs so that they do not stop at procuring devices or a Learning Management System (LMS), but ensure that evaluative-argumentative literacy is embedded in the design of tasks, assessment rubrics, and the academic code of ethics in cyberspace.

Sufism offers a correction to the instrumentalist orientation of technology. Ghazali places the goal of education on the formation of character and the purification of the heart, so that knowledge does not fall into *jāh* (status) or *riyā'* (self-promotion) [8]. Chittick interprets the horizon of Sufistic knowledge as self-transformation towards divine recognition a perspective that frames the use of technology as a trust, not merely a tool for efficiency [9]. Schimmel highlights the dimensions of love, *tawāḍu'*, and tolerance in the Sufi tradition, which today can be translated into the ethics of dialogue, non-toxicity, and digital compassion [10]. Nasr and al-Attas emphasize the importance of placing knowledge within a sacred cosmological-ethical order; this framework provides a basis for evaluating digital platforms, algorithms, and practices from the perspective of wisdom and decorum, not just pragmatic utility [11, 21].

When translated to institutional management, Sufi values guide the organizational culture: *ikhlas* (service orientation), *muhasabah* (data-based reflection), *ihsan* (quality orientation), *ukhuwwah* (cross-unit collaboration), and *tawazun* (balance of academic and spiritual achievements). These values become performative if they are institutionalized in policies: recruitment and development of teachers based on character, digital ethics discipline, restorative justice practices for cyber violations, and institutional rituals that foster inner presence (*muraqabah*) amid the deluge of screen distractions [22–24].

Education management literature asserts that quality improvement rests on the continuous cycle of Plan–Do–Check–Act (PDCA) and instructional leadership that fosters a learning organizational culture [25]. Fullan emphasizes that educational change is a social process relying on the building of collective capacity, not instantaneous policy interventions, [14] while Hattie confirms the importance of clarity of goals and effective feedback for learning outcomes [15]. In Islamic education, this principle aligns with Sufistic ethos such as *tazkiyah* (purification/self-discipline) and reflective practices (*murāqabah*), which underscore discipline, continuous improvement, and ethical awareness [10]. In the digital era, integrating Sufistic values with education management demands ethical data governance, protected privacy, and unbiased use of learning analytics so that digital transformation does not widen the access gap [26].

For Islamic educational institutions, this integration means: (a) a curriculum architecture that links *tazkiyah* competence digital citizenship, as supported by recent studies on value-based Islamic digital pedagogy; [27] (b) institutional policies on information literacy and media ethics covering plagiarism, attribution, and responsible AI-assisted writing aligned with emerging research on ethical digital practices in Muslim-majority educational settings; [28] (c) systematic professional development for teachers on critical

digital pedagogy and algorithmic awareness, consistent with findings on teacher readiness in technologically mediated Islamic learning environments; [29] and (d) evaluation mechanisms that combine academic and moral indicators, such as civility indices in online forums, argumentation quality based on primary Islamic sources, and fact-checking competencies, which are emphasized in contemporary research on digital character education and Islamic epistemology [30]. Together, these elements reinforce the alignment between sufistic ethics, Islamic educational management, and the demands of a digitally saturated learning ecosystem.

The binding of Sufism management digital literacy can be summarized in three guiding questions:

- Why (telos): The goal of education is the formation of a civilized person (adab/Ihsan), not just a skill-holder [8–11, 21].
- How (process): Governance that fosters a reflective, collaborative, and evidence-based culture [12–15, 31].
- With what (competencies and tools): An explicit digital literacy curriculum (source evaluation, argumentation, ethical participation), open infrastructure, and data ethics protocols [16–20, 32,33].

The alignment principle underpins these three interconnected points: Sufi values are translated into behavioral indicators (rubrics), mediated by managerial processes (SOPs, monitoring), and realized in digital learning practices (assignments, feedback, artifacts). This alignment ensures the curriculum is not merely a normative declaration but a living system that is measurable and auditable. From the perspective of the researcher's position, this study starts from the view that the modernization of Islamic education cannot be separated from the unification of the dimensions of Sufi spirituality, education management governance, and digital literacy competency an integration that is still rare in contemporary studies.

The novelty of this research lies in offering an integrative model that positions tazkiyah (self-purification/discipline) as the ethical foundation, management principles as the systemic driver, and digital literacy as the epistemic competency that mutually support the design, implementation, and evaluation of Islamic education. This approach expands the discourse of previous literature, which tended to separate digital ethics [98], institutional effectiveness [14], and spiritual formation [10], by proposing a framework that is not only conceptual but also operational and testable through field studies. The impact is potentially significant for Islamic educational institutions, as this model creates space for curriculum reconstruction, enhancing teacher competency, and establishing digital-ethics standards rooted in Sufistic values, thereby fostering graduates who are morally excellent, digitally proficient, and intellectually mature [27].

II. RESEARCH METHOD

This research employs a library research approach, a method that focuses on collecting, processing, and analyzing data from relevant literature such as academic books, reputable journal articles, proceedings, and international institution reports. Library research was chosen because the theme the integration of Islamic education management, Sufism, and digital literacy requires in-depth conceptual analysis, historical review, and a synthesis of ideas across disciplines, most of which are found in written sources [39]. According to Zed, library research is a research activity carried out by utilizing library sources to obtain research data, which involves reading, note-taking, and processing relevant data [40]. Thus, this research is not oriented towards fieldwork data collection but rather towards exploring theories, concepts, and previous research findings.

- Primary sources: These include classic and modern works relevant to Sufism and Islamic education, such as Ihya' 'Ulum al-Din by al-Ghazali, [8] The Concept of Education in Islam by Syed Muhammad Naquib al-Attas, [7] and Mystical Dimensions of Islam by Annemarie Schimmel [10]. Additionally, primary literature on educational management like Theories of Educational Leadership and Management by Tony Bush [12] is an important reference.
- Secondary sources: These consist of recent research from reputable international journals such as Digital Journalism, American Behavioral Scientist, Religions, and Contemporary Islam, which provide a contemporary perspective on digital literacy, media ethics, and the dynamics of the digital space for Muslims [3, 31, 43,44].

The use of these sources allows for an interdisciplinary analysis that is grounded not only in the classical Islamic intellectual tradition but also in contemporary discourse on education, technology, and management.

Data collection was carried out through three main stages:

- Literature inventory: Searching for relevant sources through university libraries, reputable journal databases (Scopus, Web of Science, DOAJ), and academic online repositories. This process follows the standards of a Systematic Literature Review (SLR) which recommends a structured search with specific keywords, for example: Islamic education management, Sufism and education, digital literacy in Muslim societies, and interdisciplinary education approach [42].
- Literature classification: Grouping the sources based on thematic categories, namely (a) Islamic education management, (b) Sufism and spiritual education, and (c) digital literacy.
- Data note-taking and synthesis: Creating notes of citations, content summaries, and concept maps, which are then analyzed comparatively.

The data analysis in this library research uses a content analysis and comparative analysis approach. Content analysis is performed by examining the meaning of the texts, concepts, and arguments contained in the literature. Krippendorff defines content analysis as a research technique that allows for reproducible and valid inferences from data to its context [43].

In this study, content analysis is applied to:

- Identify the main ideas of Islamic education management in modern literature.
- Find Sufi values relevant to contemporary education.
- Explore concepts of digital literacy that can be synergized with Islamic education.

Meanwhile, comparative analysis is used to compare the views of classical and contemporary figures, as well as between Western and Islamic literature. For example, a comparison between al-Ghazali's concept of tahdzib al-nafs and critical digital literacy a la Hobbs, [17] or between al-Attas's vision of education and Jenkins's idea of participatory culture [20].

In library research, validity is not measured through field instruments, but through the quality of the literature used and the accuracy of the analysis. Therefore, several steps were taken, including:

- External criticism: Evaluating the authenticity of sources (publication year, publisher, author's authority).
- Internal criticism: Assessing the content of the text by considering its historical, epistemological, and contemporary relevance.
- Source triangulation: Comparing several different literatures to avoid a single bias. For example, using al-Ghazali's classic works compared with modern interpretations by Chittick and Schimmel.

In library research, the researcher functions as the key instrument who directs the processes of selecting, interpreting, and synthesizing literature. The researcher's position in this study is that of an interdisciplinary analyst striving to bridge sufistic traditions, educational management theories, and contemporary digital literacy. Thus, this research is not only descriptive but also analytical and normative. To maintain the quality of findings, the validation process is conducted through source triangulation by comparing authoritative books, reputable journal articles, and recent empirical studies [45] as well as conceptual cross-checking to ensure that concept integration does not become overlapping or biased [46]. This validation is further reinforced through peer debriefing, namely critical discussions with colleagues to assess the consistency of arguments and the coherence of interdisciplinary synthesis [47], along with an audit trail that documents the procedures of literature searching, inclusion exclusion criteria, and stages of analysis transparently [48]. In addition, a critical interpretive analysis is carried out to evaluate the epistemological compatibility between Sufism, educational management, and digital literacy so that the resulting integration remains theoretically precise [49]. The combination of these validation techniques ensures that the research findings possess strong credibility, traceability, and academic justification, while also allowing them to be replicated or further tested in subsequent field studies, for more details see Figure 1.
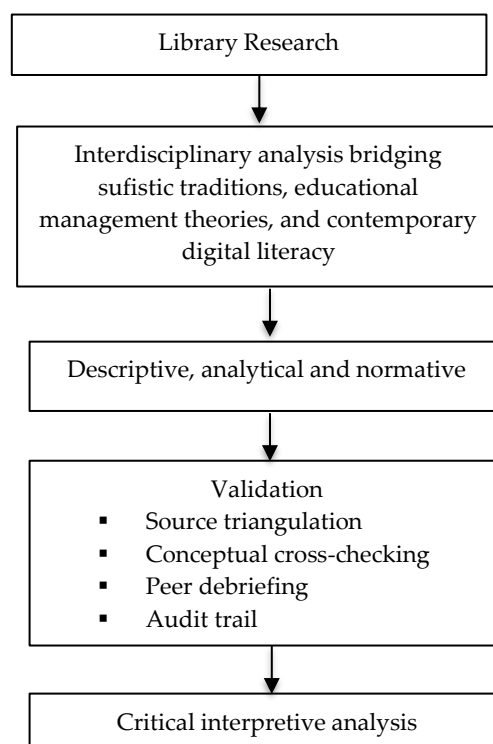
FIGURE 1. Diagram of the research methodology.

III. RESULTS AND DISCUSSION

1. THE SPIRITUAL FOUNDATION OF ISLAMIC EDUCATION

From its earliest development, Islamic education management has not only prioritized rational and administrative aspects but has also emphasized a strong spiritual foundation. In the Islamic tradition, education is viewed as ta'dīb a process of forming adab, which unites the intellectual, moral, and spiritual dimensions of a person [7]. Al-Attas asserted that the goal of Islamic education is not merely the transmission of knowledge but the formation of a civilized human being a person capable of putting things in their proper place according to the values of tawhid (Oneness of God) [7].

This is where Sufism plays a crucial role. With its emphasis on the inner dimension and spiritual ethics, Sufism provides a moral foundation that can guide Islamic education management to be not just pragmatic, but also transcendent. Values like ikhlas (sincerity), sabar (patience), tawakal (trust in God), and zuhud (asceticism), often considered personal virtues, can in fact become managerial principles that give a unique character to the administration of Islamic educational institutions [6. From a management perspective, Islamic education requires a leader who is not only focused on achieving academic targets but also serves as a moral and spiritual role model. This aligns with the concept of prophetic leadership, which emphasizes four core values: tabligh (transparency and communication), amanah (integrity), fathanah (managerial intelligence), and sidq (honesty) [50]. Thus, Sufi spirituality enriches established management models by adding an inner dimension to the concept of leadership.

2. THE CONTRIBUTION OF SUFI ETHICS TO EDUCATIONAL MANAGEMENT

Sufi ethics can be integrated into Islamic education management in two ways: (a) internalizing Sufi values within educational leaders themselves, and (b) institutionalizing these values in the institution's policies.

First, internalization within the leader. A leader with Sufi consciousness will carry out their duties with sincerity and a devotional orientation. In modern management theory, this concept is similar to servant leadership, popularized by Robert K. Greenleaf, which prioritizes service over power [51]. However, in the context of Sufism, service is not only for people but also a form of devotion to God. A Sufi-minded Islamic educational leader will place the interests of students, faculty, and the community above personal gain.

Second, institutionalization of Sufi values into institutional policy. For example, the principle of mujahadah (earnest striving) can be applied to the work culture of an educational institution by encouraging all members of the academic community to continuously improve quality and professionalism. The principles of shukur (gratitude) and zuhud can serve as the basis for resource management, preventing the institution from being trapped in a purely materialistic orientation. In this context, Sufism becomes a normative framework that directs the educational institution to prioritize blessing (barakah) in every managerial activity [52].

Additionally, the concept of tazkiyah al-nafs (purification of the soul) is also relevant in Islamic education management. A leader capable of self-purification will be free from greed, arrogance, and corruption. This has a direct implication for the integrity of the educational institution. Contemporary studies show that corruption in education often stems from the spiritual weakness of leaders and institutional managers [53]. Thus, integrating Sufi ethics into Islamic education management can serve as a preventative strategy against moral crises and the abuse of authority.

3. THE RELATIONSHIP BETWEEN SUFISM AND EDUCATIONAL MANAGEMENT FUNCTIONS

In the framework of management theory, there are key functions known by the acronym POAC: Planning, Organizing, Actuating, and Controlling. When viewed from a Sufi perspective, these four functions can be given an ethical and spiritual dimension.

- Planning: When planning educational programs, a leader with a Sufi spirit will base their plans on sincere intentions and a devotional orientation. The concept of intention (al-niyyah) is an essential element in all planning, as affirmed in the hadith "innama al-a'mal bi al-niyyat" (Indeed, every action depends on its intention) [54].
- Organizing: The organization of human resources in an educational institution must consider the principles of justice and equality. In Sufism, justice ('adl) is a spiritual maqam (station) that must be realized in social life.
- Actuating: The implementation of programs not only emphasizes efficiency and effectiveness but also requires a spirit of service (khidmah). A teacher, for example, does not only act as a transmitter of knowledge but also as a murabbi (spiritual educator) who guides students toward spiritual maturity.
- Controlling: Control in Islamic education management is oriented toward the principle of muraqabah (awareness of God's supervision). An educational leader who internalizes this principle will perform the control function with full responsibility, without merely relying on administrative instruments [55].

Thus, Sufism does not just complement Islamic education management normatively; it also provides an operational framework that can be implemented in all aspects of the managerial functions.

4. CONTEMPORARY ACADEMIC DISCOURSE

Recent academic studies show that the integration of Sufi values in education is not an ahistorical idea but part of a long tradition in the history of Islamic education. Al-Ghazali, for example, in Ihya' 'Ulum al-Din, affirmed the importance of combining rational knowledge with the purification of the heart as the basis for education [8]. This idea remains relevant today, especially when modern education is often criticized for overemphasizing cognitive aspects and neglecting character development.

Several contemporary studies also support the relevance of integrating Sufi values into Islamic education management. For instance, research by Niyozov and Memon highlights that modern Islamic education is often trapped in a dichotomy between religious and scientific aspects, requiring an integrative paradigm that can unite the two [56]. It is in this context that Sufism can serve as a spiritual bridge that harmonizes the intellectual, moral, and transcendental dimensions of education.

Furthermore, other research in pesantren (Islamic boarding schools) shows that the internalization of Sufi values can shape an academic culture filled with attitudes of humility (tawadu), sincerity (ikhlas), and spiritual discipline [57]. This proves that Sufism can be institutionalized in an organizational context, not just as an individual practice.

From the discussion above, it can be concluded that Sufi values make a significant contribution to Islamic education management, both in the personal dimension (internalizing values within the leader) and the institutional dimension (institutionalizing values in policy). The integration of Sufi ethics into the functions of Islamic education management (planning, organizing, actuating, controlling) can present a paradigm that is transcendent, ethical, and also applicable. Thus, Islamic education can become an alternative that is not only adaptive to the times but also capable of maintaining spiritual integrity.

5. DIGITAL LITERACY AS AN INSTRUMENT OF ISLAMIC EDUCATION TRANSFORMATION

The term digital literacy has evolved rapidly over the last two decades, especially with the advent of the knowledge society, which positions digital information as a key resource [58]. Digital literacy is not merely the technical ability to use digital devices but includes cognitive, social, and ethical skills in accessing, understanding, evaluating, and producing technology-based content [16]. Bawden explained that digital literacy consists of six dimensions: information literacy, media literacy, visual literacy, communication literacy, technological literacy, and social literacy [59]. Meanwhile, UNESCO emphasizes digital literacy as an integral part of 21st-century competencies, which requires not only technical ability but also a critical awareness of the social and cultural impacts of technology [60]. Thus, digital literacy must be understood as a comprehensive skill set that involves technical, cognitive, and ethical aspects.

In the context of Islamic education, digital literacy can be viewed as a strategic tool to improve the quality of learning, institutional management, and the strengthening of Islamic da'wah (proselytizing) that is more responsive to the times. As Rheingold asserted, digital literacy can expand the capacity of communities to collaborate, share knowledge, and build a collective identity in cyberspace [60]. Islamic educational institutions such as madrasahs, pesantren, and Islamic universities face significant challenges in the era of digital disruption. These challenges include the need to update teaching methods, expand access to knowledge sources, and build transparent and accountable management systems based on information technology [62].

Several studies show that the adoption of digital literacy in Islamic educational institutions contributes to increased learning effectiveness and managerial efficiency. For example, a study in several madrasahs in East Java found that the integration of digital platforms (Learning Management Systems/LMS) was able to increase student motivation, especially in Islamic subjects that were previously considered conventional [63]. Furthermore, in some modern pesantren, the use of social media and YouTube channels is used as a means of creative da'wah to reach a wider audience of young people [64]. However, digital literacy in Islamic education cannot be separated from the principles of ethics and spirituality. Many studies highlight the risks of information overload, social media misuse, and moral degradation due to digital content that does not align with Islamic values [65]. Therefore, digital literacy in Islamic educational institutions must be understood not just as a technical competency but also as part of a moral responsibility in shaping a generation with noble character.

Thus, the integration of digital literacy in Islamic education management must consider three main aspects: (1) technical capacity, which is the skill of educators and students in using digital devices; (2) critical capacity, which is the ability to assess the truth and relevance of information; and (3) ethical-spiritual capacity, which is the awareness to use technology responsibly in accordance with Islamic values [66].

6. INTEGRATION OF SUFISM AND DIGITAL LITERACY IN ISLAMIC EDUCATION MANAGEMENT

Sufism, as a spiritual dimension of Islam, offers a basis in ethics, self-awareness, and inner balance that is relevant for contemporary education. Since the classical era, Sufi figures such as Al-Ghazali have emphasized the importance of tazkiyatun nafs (purification of the soul) and tarbiyah ruhaniyah (spiritual education) as the foundation for the formation of the insan kamil (perfect human being) [8]. In the context of educational

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management, Sufi principles can provide an ethical and humanistic framework that transcends a purely technocratic approach [67].

Islamic education today faces major challenges in the form of commercialization, bureaucratization, and digitalization, which sometimes diminish its spiritual dimension. Therefore, Sufism serves as a counterbalance that ensures digital innovation does not ignore ethical and spiritual aspects [57]. Thus, Sufism can be positioned as the "soul" of digital literacy in Islamic education management. One of the biggest challenges of digital literacy is the deluge of information, which often brings bias, disinformation, and even negative content. In this regard, Sufi values can be an ethical framework that guides educators and students in sorting and processing digital information. For example, the concept of muraqabah (awareness of God's supervision) can encourage caution in using social media, while the principle of zuhud (not being excessive) can reduce the consumerist tendency toward digital technology [68].

Several studies show that the internalization of Sufi values into digital literacy practices can strengthen the critical thinking and ethics of young Muslims. A study at Sunan Kalijaga State Islamic University, for instance, found that students who were equipped with Sufism-based digital ethics were more selective in accessing information and more responsible in producing religious content on social media [63]. Thus, Sufism not only enriches the cognitive dimension of digital literacy but also deepens its moral and spiritual dimensions.

The integration of Sufism and digital literacy in Islamic education management can be realized through an interdisciplinary model that includes three main layers:

- Philosophical Layer Sufism provides a basis of values (ihsan, ikhlas, zuhud, sabar) that serve as the foundation for guiding the use of technology.
- Pedagogical Layer Digital literacy functions as a methodological instrument that expands access to knowledge, increases active student participation, and supports innovation in learning.
- Managerial Layer Islamic education management facilitates the implementation of this integration through policies, institutional structures, and an organizational culture that supports spirituality-based digitalization [64].

In practice, this model can be realized through:

- A curriculum based on the integration of knowledge, technology, and Sufism.
- Training for teachers and educational staff on Sufi digital ethics.
- The use of digital platforms to strengthen spirituality, such as dhikr apps, online Sufi studies, and digital ethics discussion forums.
- Institutional governance that promotes transparency, collaboration, and the value of amanah (trustworthiness) based on Sufi principles.

Although the integration of Sufism and digital literacy holds great promise, several challenges also arise. First, there is resistance from some educators and administrators who still hold a dichotomous view between the Sufi tradition, which is considered conservative, and digital technology, which is modern. [60] Second, there is the limitation of digital infrastructure in some Islamic educational institutions in remote areas. [61] Third, there is a lack of literature and research that systematically elaborates on the integration of Sufism with digital literacy [57].

However, the prospects remain very high. First, this integration can produce a generation of Muslims who are not only digitally intelligent but also spiritually mature. Second, it can reduce the negative impacts of digital technology such as online radicalization, hate speech, and moral degradation. Third, this integration has the potential to give birth to a new paradigm of sustainable Islamic education education that is adaptive to the times without losing its spiritual roots [74].

7. A MODEL FOR INTEGRATED ISLAMIC EDUCATION

This model combines three core pillars to create a holistic educational approach: Sufi Spirituality, Digital Literacy, and Educational Management.

- Sufism focuses on purifying the heart, shaping character, and achieving divine consciousness (ma'rifah). When applied to digital literacy, Sufism provides an ethical foundation for using technology. For example, the concept of muhasabah (introspection) is used for critical self-reflection on the digital information we

consume and share. Similarly, the principle of wara' (cautiousness) guides students in avoiding negative content and fake news [8, 10]. This ensures digital literacy isn't just a technical skill but also a means of cultivating spiritual consciousness.

- Educational Management provides the essential functions of planning, organizing, actuating, and controlling. In the digital era, these functions are optimized with technology. However, without a Sufi value system, this digitalization could lead to dehumanization or a dry, bureaucratic formality [77, 78]. The integration of Sufism ensures that these management functions are not just for technical efficiency, but also for achieving spiritual goals.
- Digital planning can be guided by the institution's transcendental vision.
- Collaborative platforms are used with a spirit of ukhuwah (brotherhood).
- Social media engagement prioritizes da'wah bil-hikmah (wise proselytizing).
- Data oversight is combined with the principle of amanah (trustworthiness) [68].

FIGURE 2: A model for integrated islamic education

- Digital Literacy equips students with the technical, critical, and productive skills to use technology effectively. This pillar ensures students can navigate the digital world safely and ethically.

These three pillars support each other, forming an interdisciplinary triangle for Islamic education. According to Repko, an effective interdisciplinary approach doesn't just add perspectives together but creates a richer, more applicable new synthesis [75]. This model offers a framework for Islamic institutions to develop curriculum, governance, and character-building programs for the digital age. By grounding digital literacy in Sufism, institutions can strengthen students' cognitive and technical skills while safeguarding their morality and spirituality.

8. CASE STUDIES AND IMPLEMENTATION OF THE INTEGRATIVE MODEL IN ISLAMIC INSTITUTIONS

Islamic educational institutions in Indonesia including Madrasahs, Pesantren, and Islamic Universities (PTKI) are strategically positioned to integrate educational management, Sufism, and digital literacy. As the government, through the Ministry of Religious Affairs, encourages digitalization, various innovative programs are being implemented [81].

9. MADRASAH

Since 2019, the "Digital Madrasah" initiative has developed a Learning Management System (LMS), online attendance applications, and digital administration [81]. However, Sufi values like ikhlas (sincerity), amanah (trustworthiness), and tawakkal (reliance on God) are often overlooked. Integrating Sufi principles ensures digital transformation isn't just a technical formality. A holistic model of Islamic digital literacy begins with a curriculum that embeds akhlaq al-karimah into every digital skill. Students are not only taught how to navigate media, but how to discern truth, avoid harmful content, cite responsibly, and uphold adab when interacting online. This curriculum becomes the moral backbone of their digital engagement.

To reinforce this, the madrasah environment must cultivate a spiritual culture shaped by dhikr, prayer, and disciplined device use ensuring that technology supports, rather than distracts from, inner refinement. Spaces of learning are infused with calmness and remembrance, helping students maintain balance between

the digital and spiritual worlds. Digital learning management then serves as the operational framework that keeps the system ethical and orderly. By grounding digital governance in honesty, openness, and responsibility, teachers model integrity in all online practices from managing e-learning platforms to providing feedback. This ethical alignment ensures that technology use strengthens character, deepens learning, and reflects Islamic educational values.

ISLAMIC DIGITAL LITERACY CURRICULUM

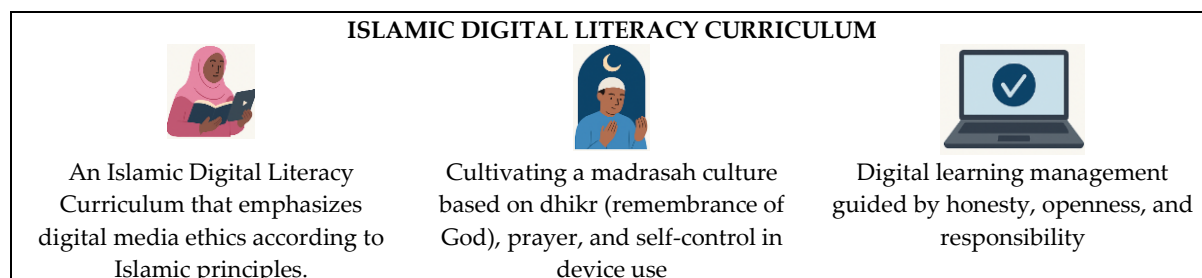|		
An Islamic Digital Literacy Curriculum that emphasizes digital media ethics according to Islamic principles.	Cultivating a madrasah culture based on dhikr (remembrance of God), prayer, and self-control in device use	Digital learning management guided by honesty, openness, and responsibility

FIGURE 3: Islamic digital literacy curriculum.

Research by Asrori shows that madrasahs integrating Sufi values into technology-based learning improve student discipline and foster positive digital ethics [83].

10. PESANTREN

As the oldest Islamic educational institutions in Indonesia, pesantren are known for their strong Sufi traditions. The challenge is to maintain these traditions while adopting modern technology.

Tebuireng Pesantren has developed an e-learning platform to expand access to religious learning, while Gontor Pesantren utilizes digital information systems to manage dormitories and financial administration more efficiently. Daarut Tauhiid Pesantren, meanwhile, engages in digital da'wah by disseminating modern Sufi content to wider audiences. Integrating Sufi values within these digital pesantren initiatives includes strengthening the tasawwuf curriculum through online learning such as studying Ihya' Ulumuddin via Zoom promoting ethical digital da'wah that encourages proper etiquette in commenting and sharing while avoiding hate speech, and implementing IT-based pesantren management grounded in the principles of ukhuwah (brotherhood) and barakah (blessing).
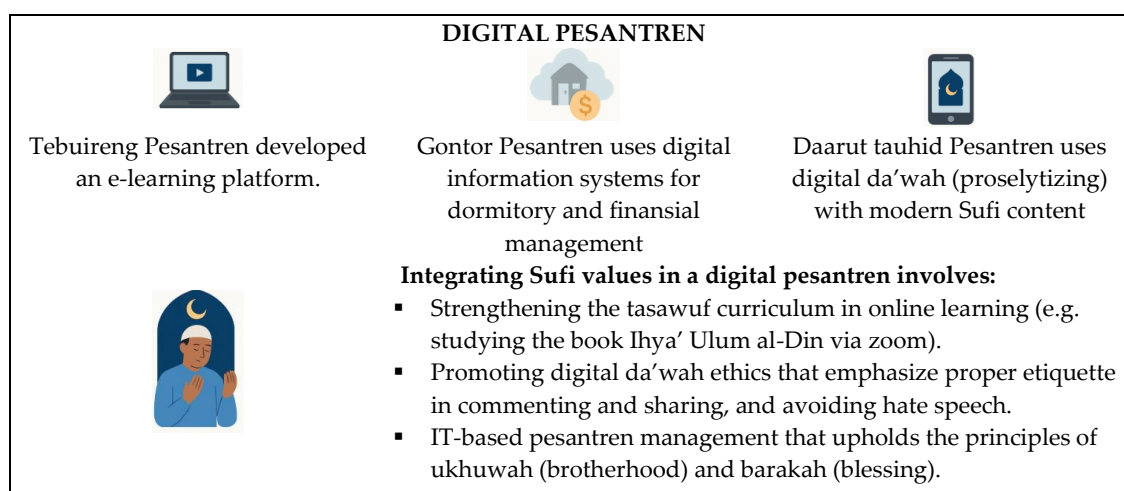

DIGITAL PESANTREN

Tebuireng Pesantren developed an e-learning platform.	Gontor Pesantren uses digital information systems for dormitory and finansial management	Daarut tauhid Pesantren uses digital da'wah (proselytizing) with modern Sufi content

Integrating Sufi values in a digital pesantren involves:
- Strengthening the tasawuf curriculum in online learning (e.g. studying the book Ihya' Ulum al-Din via zoom).
- Promoting digital da'wah ethics that emphasize proper etiquette in commenting and sharing, and avoiding hate speech.
- IT-based pesantren management that upholds the principles of ukhuwah (brotherhood) and barakah (blessing).

FIGURE 4: Examples of digital Pesantren.

This approach allows pesantren to preserve their Sufi heritage while adapting to modern needs

11. PERGURUAN TINGGI ISLAM (PTKI - ISLAMIC UNIVERSITIES)

Islamic universities are confronting the challenges of globalization and the 4.0 Industrial Revolution. Integrating management, Sufism, and digital literacy is key to producing graduates who are globally competitive but rooted in Islamic spirituality [70].

Implementation in universities includes: Interdisciplinary curricula that combine religious studies, educational management, and digital skills; Establishing centers for digital Sufism studies to examine the relevance of Sufism in addressing social media problems, misinformation, and youth moral crises; Transformative-Sufistic leadership at the rectorate or faculty level, which guides campus digitalization with a spiritual vision [86].

For example, UIN Sunan Kalijaga in Yogyakarta developed a "Cyber Islamic Studies" program, and UIN Syarif Hidayatullah in Jakarta established a Center for Sufism Studies [87]. This integration can produce a new model of a transdisciplinary Muslim academic a scholar who is proficient in technology and management while remaining firm in Islamic spirituality and ethics.

12. CHALLENGES AND SOLUTIONS

Implementing this integrative model faces several complex challenges. Challenges and Sufi-Based Solutions for Digital Transformation in Pesantren.
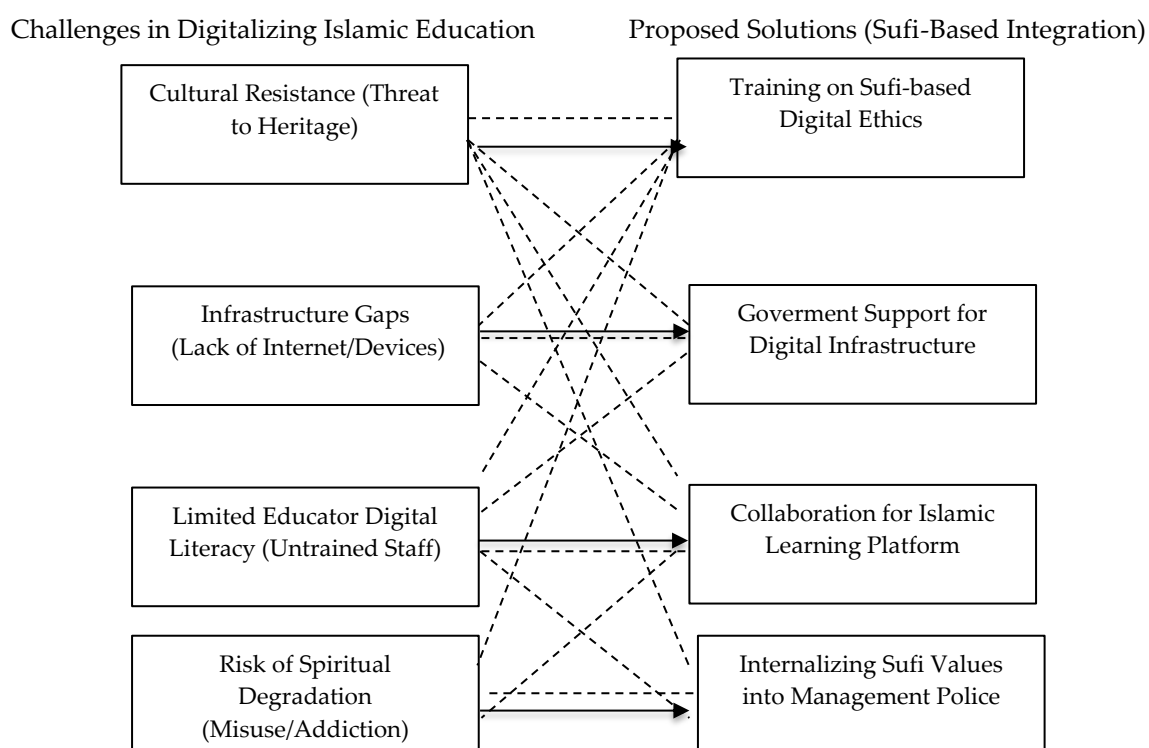

FIGURE 5: Challenges and Sufi-based solutions.

While these challenges are significant, they also create opportunities for creative, adaptive, and innovative solutions, ensuring the sustainable integration of these three crucial pillars.

13. CHALLENGES TO IMPLEMENTATION

One of the main obstacles is the gap in access to digital technology. Not all Islamic educational institutions, especially in rural or remote areas, have adequate information technology infrastructure [88].

This includes limited internet access, a lack of digital devices, and a minimal level of competence among educators in using technology [78]. This digital divide can create a disparity in the quality of education between urban and rural Islamic educational institutions. As a result, the benefits of digital transformation may only be enjoyed by certain groups, while others are left behind. Some within the Islamic education community show resistance to the use of digital technology. This is driven by concerns about moral degradation, secularization, or the loss of the oral and face-to-face traditions of pesantren (Islamic boarding schools) [89]. This challenge is further complicated by ideological views that see modern technology as a threat to the purity of Islamic teachings.

In practice, digital literacy is often positioned as a supplement rather than an integral part of the Islamic education curriculum. As a result, mastery of technology is often seen only as a technical skill, without being accompanied by the development of critical awareness and Sufistic ethics [91]. Digital spaces not only provide positive information but are also filled with negative content such as hoaxes, hate speech, pornography, and radical ideologies [92]. Without Sufistic guidance and wise educational management, students are at risk of falling into deviant behaviors. Structurally, there are still minimal Islamic education policies that comprehensively regulate the strengthening of digital literacy based on Sufi values. Existing policies tend to focus on the technical aspects of educational digitalization, while the spiritual aspect is often neglected [93].

14. IMPLEMENTATION SOLUTIONS

The government and Islamic educational institutions need to expand access to digital technology, especially in underdeveloped areas. Digital inclusion programs should be supported by providing internet access, subsidizing digital devices, and offering training for teachers and students [94]. Cultural resistance can be overcome by introducing digital literacy through a Sufistic approach. Sufism emphasizes the balance between the material and spiritual worlds, so the use of technology can be positioned as a means of worship and proselytizing, not as a threat [95]. In this way, teachers and kyai (religious scholars) can make technology a part of intellectual and spiritual development.

The Islamic education curriculum needs to include digital literacy as a core competency integrated with character education and tasawuf (Sufism). With this model, students not only master technical skills but also internalize ethical and spiritual values in their use of technology [96]. Students need to be trained to critically select and evaluate digital information. Sufi principles, such as muraqabah (awareness of Allah's supervision) and tazkiyah an-nafs (purification of the soul), can be used as a basis for forming ethical behavior in digital spaces [8]. The Ministry of Religious Affairs and related authorities need to formulate policies that encourage the integration of digital literacy and Sufi values in Islamic education. These policies should include teacher competency standards, curriculum development, the creation of Islamic-value-based Learning Management Systems (LMS), and supervision of educational digital content [97].

IV. CONCLUSION

This interdisciplinary study on Islamic educational management, Sufism, and digital literacy confirms that these three are not separate entities, but rather intertwined, forming a new paradigm for the development of Islamic education in the digital era. Islamic educational management based on Sufism and digital literacy offers a transformative model that can address the challenges of the times while preserving the authenticity of Islamic spiritual values.

First, from the perspective of Islamic educational management, this research shows that managing Islamic educational institutions should not only emphasize administrative and structural aspects but also spiritual and ethical ones. Management principles like planning, organizing, implementing, and evaluating can gain additional moral strength when supported by Sufistic values such as ikhlas (sincerity), amanah (trustworthiness), muraqabah (awareness of Allah's supervision), and istiqamah (steadfastness).

Second, from the perspective of Sufism, Islamic education faces an urgent need to instill spiritual values amidst the flow of digital globalization. Sufism acts as a moral foundation that can guide the use of technology so it doesn't get trapped in digital hedonism or materialism. As Nasr states, Sufism is the "heart

of Islam" that gives the deepest meaning to worship, ethics, and human existence. Therefore, integrating Sufism into digital literacy allows for the creation of a literacy model that is not only technically smart but also spiritually wise.

Third, from the perspective of digital literacy, this research confirms that the ability of students and educators to access, understand, evaluate, and create digital information is crucial for the future quality of Islamic education. Digital literacy, when understood comprehensively, includes technical, cognitive, critical, social, and ethical dimensions. With a Sufi framework, digital literacy is positioned not just as a skill but as a righteous deed (amal saleh) that must be carried out with moral responsibility.

Fourth, case studies in madrasahs, pesantren, and Islamic universities show that this integrative model can be implemented with various approaches. Sufistic-based pesantren can use digital media as a means of creative proselytizing; madrasahs can use Learning Management Systems (LMS) to strengthen Islamic learning; and Islamic universities can develop digital literacy research from an Islamic ethical perspective.

Thus, the main conclusion of this study is that Islamic educational management, by integrating Sufism and digital literacy, can give rise to an excellent and adaptive educational paradigm that remains rooted in Islamic spiritual values. In short, the integration of Islamic educational management, Sufism, and digital literacy is not just an option, but a strategic necessity. On one hand, digital literacy demands technological adaptation; on the other, Sufism provides moral guidance so that technology does not lose its spiritual soul. Therefore, the future of Islamic education must be directed toward producing a generation that is not only digitally intelligent but also wise, virtuous, and contributes to realizing a Golden Indonesia 2045.

In line with the view of al-Ghazali, true education is one that can synergize the mind and the heart. Thus, Islamic educational management based on Sufism and digital literacy is a concrete answer to global challenges and a bridge toward the sustainable transformation of Islamic civilization.

Author Contributions

Andi Warisno, as the principal initiator of this research and the author of the article draft. M. Afif Anshori, as a contributor to the sections on Sufism and as the manuscript editor. Nut Hidayah, as the final reviewer and harmonizer of the journal manuscript.

Conflicts of Interest

The authors have no potential conflicts of interest.

Data Availability Statement

Data are available from the authors upon request.

REFERENCES

1. Boyd, D. (**2014**). *It's complicated: The social lives of networked teens* (pp. 24–31). Yale University Press.
2. Buckingham, D. (**2003**). *Media education: Literacy, learning and contemporary culture* (pp. 35–41). Polity.
3. Tandoc, E. C., Jr., Lim, Z. W., & Ling, R. (**2018**). Defining "fake news." *Digital Journalism, 6*(2), 137–153.
4. Wardle, C., & Derakhshan, H. (**2017**). *Information disorder* (pp. 20–29). Council of Europe.
5. Halstead, J. M. (**2004**). An Islamic concept of education. *Comparative Education, 40*(4), 517–529.
6. Azra, A. (**2012**). *Pendidikan Islam: Tradisi dan modernisasi di tengah tantangan milenium III* (pp. 3–15). Kencana.
7. Al-Attas, S. M. N. (**1991**). *The concept of education in Islam: A framework for an Islamic philosophy of education* (pp. 12–15). ISTAC.
8. Al-Ghazali. (**2005**). *Ihya' 'ulum al-din* (pp. 87–95). Dar al-Ma'rifah.
9. Chittick, W. C. (**1989**). *The Sufi path of knowledge* (pp. 7–18). SUNY Press.

10. Schimmel, A. (**1975**). *Mystical dimensions of Islam* (pp. 108–114). University of North Carolina Press.

11. Nasr, S. H. (**1989**). *Knowledge and the sacred* (pp. 69–82). SUNY Press.

12. Bush, T. (**2011**). *Theories of educational leadership and management* (pp. 1–20). SAGE.

13. Hoy, W. K., & Miskel, C. (**2013**). *Educational administration: Theory, research, and practice* (pp. 129–156). McGraw-Hill.

14. Fullan, M. (**2016**). *The new meaning of educational change* (pp. 1–22). Teachers College Press.

15. Hattie, J. (**2009**). *Visible learning: A synthesis of over 800 meta-analyses* (pp. 151–190). Routledge.

16. Gilster, P. (**1997**). *Digital literacy* (pp. 1–34). Wiley.

17. Hobbs, R. (**2011**). *Digital and media literacy: Connecting culture and classroom* (pp. 15–28). Corwin.

18. Eshet-Alkalai, Y. (**2004**). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia, 13*(1), 93–106.

19. Selwyn, N. (**2016**). *Education and technology: Key issues and debates* (pp. 81–99). Bloomsbury.

20. **[**Jenkins, H. (**2009**). *Confronting the challenges of participatory culture* (pp. 5–19). MIT Press.

21. Al-Attas, S. M. N. (**1978**). *Islam and secularism* (pp. 121–135). ABIM.

22. Beekun, R. I. (**1997**). *Islamic business ethics* (pp. 25–36). IIIT.

23. Knysh, A. (**2010**). *Islamic mysticism: A short history* (pp. 221–234). Brill.

24. Scharmer, O. (**2009**). *Theory U: Leading from the future as it emerges* (pp. 35–48). Berrett-Koehler.

25. Deming, W. E. (**2000**). *Out of the crisis* (pp. 88–94). MIT Press.

26. Willingham, D. T., & Kirschner, P. A. (**2020**). Critical thinking and data ethics. *Educational Psychologist, 55*(3), 150–162.

27. Fitriah, N. (**2022**). Integrating Islamic values and digital literacy. *Journal of Islamic Education Studies, 10*(2), 145–162.

28. Al-Rawashdeh, A., & Al-Mohtadi, R. (**2021**). Information ethics and digital responsibility. *International Journal of Information Ethics, 15*(1), 33–47.

29. Yusuf, M., & Busari, A. (**2020**). Teacher digital competence. *Journal of Education and e-Learning Research, 7*(4), 456–464.

30. Abdullah, N. (**2021**). Digital adab and critical reasoning. *Journal of Muslim Minority Affairs, 41*(4), 612–630.

31. Slade, S., & Prinsloo, P. (**2013**). Learning analytics: Ethical issues. *American Behavioral Scientist, 57*(10), 1510–1529.

32. Williamson, B. (**2017**). *Big data in education* (pp. 54–72). SAGE.

33. D'Ignazio, C., & Klein, L. (**2020**). *Data feminism* (pp. 67–88). MIT Press.

34. Bunt, G. R. (**2009**). *iMuslims: Rewiring the house of Islam* (pp. 1–20). University of North Carolina Press.

35. Howard, P. N. (**2010**). *The digital origins of dictatorship and democracy* (pp. 10–27). Oxford University Press.

36. Halim, A., & Mohd Nor, M. R. (**2021**). Islamic education in a plural society: Issues and challenges. *Religions, 12*(3), 1–15.

37. Anderson, J. W. (**2011**). Cybernauts of the Arab Spring. *Anthropology Today, 27*(2), 2–8.

38. Selander, S., & Kress, G. (**2010**). *Designs for learning* (pp. 23–40). Sense Publishers.

39. Creswell, J. W. (**2014**). *Research design: Qualitative, quantitative, and mixed methods approaches* (pp. 32–35). SAGE.

40. Zed, M. (**2004**). *Metode penelitian kepustakaan* (p. 3). Yayasan Obor Indonesia.

41. Hasan, N. (**2007**). Radical Islam and the cyberspace. *Contemporary Islam, 1*(1), 26.

42. Kitchenham, B. (**2004**). *Procedures for performing systematic literature reviews* (pp. 5–7). Keele University.

43. Krippendorff, K. (**2013**). *Content analysis: An introduction to its methodology* (p. 24). SAGE.

44. Moleong, L. J. (**2010**). *Metodologi penelitian kualitatif* (p. 9). PT Remaja Rosdakarya.

45. Bowen, G. A. (**2009**). Document analysis. *Qualitative Research Journal, 9*(2), 27–40.

46. Miles, M. B., Huberman, A. M., & Saldaña, J. (**2014**). *Qualitative data analysis* (3rd ed., pp. 276–289). SAGE.

47. Lincoln, Y. S., & Guba, E. G. (**1985**). *Naturalistic inquiry* (pp. 308–331). SAGE.

48. Korstjens, I., & Moser, A. (**2018**). Trustworthiness and publishing. *European Journal of General Practice, 24*(1), 120–124.

49. Thorne, S. (**2016**). *Interpretive description* (2nd ed., pp. 95–108). Routledge.

50. Kuntowijoyo. (**1997**). *Identitas politik umat Islam* (pp. 143–145). Mizan.

51. Greenleaf, R. K. (**1977**). *Servant leadership* (pp. 13–15). Paulist Press.

52. Madjid, N. (**1992**). *Islam doktrin dan peradaban* (pp. 178–180). Paramadina.

53. Rosyada, D. (**2014**). *Paradigma pendidikan demokratis* (pp. 211–212). Kencana.

54. Al-Bukhari. (**1987**). *Shahih al-Bukhari* (Kitab al-Iman, Hadith No. 1). Dar al-Fikr.

55. Rahmat, J. (**2003**). *Psikologi agama* (pp. 95–97). Mizan.

56. Niyozov, S., & Memon, N. (**2011**). Islamic education and Islamization. *Journal of Muslim Minority Affairs, 31*(1), 5–30.

57. Bagir, Z. A. (**2007**). Pesantren dan transformasi sosial. *Studia Islamika, 14*(2), 234–237.

58. Castells, M. (**2010**). *The rise of the network society* (pp. 21–23). Blackwell.

59. Bawden, D. (**2001**). Information and digital literacies. *Journal of Documentation, 57*(2), 221–228.

60. UNESCO. (**2018**). *Global framework of reference on digital literacy skills* (p. 9). UNESCO.

61. Rheingold, H. (**2012**). *Net smart: How to thrive online* (p. 45). MIT Press.

62. Yusnadi, & Rahmawati. (**2021**). Digitalisasi pendidikan Islam. *Jurnal Pendidikan Islam Indonesia, 5*(1), 67–69.

63. Fathurrahman. (**2020**). Integrasi LMS dalam madrasah. *Jurnal Teknologi Pendidikan, 12*(3), 110–115.

64. Arifin, Z. (**2019**). Pesantren digital dan dakwah milenial. *Jurnal Komunikasi Islam, 8*(2), 205–207.

65. Gunawan, H. (**2020**). Risiko literasi digital. *Jurnal Pendidikan Karakter, 10*(1), 45–47.

66. Fauzi, A. (**2021**). *Etika digital dalam perspektif Islam* (pp. 54–55). Rajagrafindo.

67. Nasr, S. H. (**2003**). *The heart of Islam* (p. 122). HarperOne.

68. Chittick, W. (**2000**). *Sufism: A short introduction* (pp. 58–59). Oneworld.

69. Munir, A. (**2021**). Etika digital dalam bingkai sufisme. *Jurnal Etika Islam Kontemporer, 4*(1), 77–79.

70. Azra, A. (**2006**). *Paradigma baru pendidikan nasional* (p. 145). Pustaka Alvabet.

71. Hasyim, F. (**2019**). Dikotomi modernitas dan tradisi. *Jurnal Pendidikan Islam, 7*(1), 13–15.

72. Oktaviani, R. (**2020**). Kesenjangan digital. *Jurnal Teknologi Pendidikan Islam, 6*(2), 101–102.

73. Ramzy, I. (**2022**). Spiritualizing digital literacy. *Journal of Muslim Societies, 12*(3), 287–289.

74. Mas'ud, A. (**2018**). *Menggagas format pendidikan Islam di era global* (p. 91). UII Press.

75. Nasution, H. (**1992**). *Falsafat dan mistisisme dalam Islam* (p. 87). Bulan Bintang.

76. Zarkasyi, H. F. (**2020**). Tasawuf dan etika digital. *Jurnal Ilmu Pendidikan Islam, 5*(1), 77–79.

77. Terry, G. R. (**1968**). *Principles of management* (p. 12). Irwin.

78. Huda, M. (**2021**). Digitalisasi dan krisis spiritual. *Tarbawi, 7*(1), 14–16.

79. Handoko, T. H. (**2008**). *Manajemen* (p. 51). BPFE.

80. Repko, A. F. (**2012**). *Interdisciplinary research* (p. 72). SAGE.

81. Kementerian Agama RI. (**2020**). *Transformasi digital madrasah* (p. 7). Direktorat KSKK Madrasah.

82. Nurhadi. (**2021**). Manajemen madrasah digital. *Jurnal Manajemen Pendidikan Islam, 5*(2), 200–203.

83. Asrori, A. (**2022**). Integrasi nilai sufistik. *Edukasi Islamika, 8*(1), 44–45.

84. Dhofier, Z. (**2011**). *Tradisi pesantren* (p. 89). LP3ES.

85. Hidayat, N. (**2020**). Pesantren di era digital. *Tarbiyatuna, 6*(2), 144–147.

86. Yusuf, C. (**2020**). Kepemimpinan transformatif-sufistik. *Jurnal Pendidikan Islam, 9*(2), 221–223.

87. UIN Sunan Kalijaga. (**2019**). *Cyber Islamic studies* (p. 22). Pustaka Pelajar.

88. Warschauer, M. (**2003**). *Technology and social inclusion* (pp. 41–43). MIT Press.

89. Fauzi, A. (**2020**). Digital divide. *Jurnal Pendidikan Islam, 7*(1), 23–25.

90. Bruinessen, M. van. (**2015**). *Traditions and reforms in Indonesian pesantren* (pp. 87–88). KITLV Press.

91. Nuryanto, E. (**2021**). Integrasi literasi digital. *Jurnal Ilmu Pendidikan Islam, 12*(2), 103–104.

92. Livingstone, S., & Helsper, E. (**2007**). Gradations in digital inclusion. *New Media & Society, 9*(4), 671–696.

93. Latif, Y. (**2012**). *Inteligensia Muslim dan kuasa* (pp. 293–294). Gramedia.

94. Warsita, B. (**2022**). Digital inclusion. *Jurnal Teknologi Pendidikan, 14*(1), 11–13.

95. Nasr, S. H. (**2008**). *Islamic spirituality: Foundations* (pp. 121–122). Routledge.

96. Yusnadi. (**2021**). Integrasi kurikulum sufistik. *Jurnal Pendidikan Islam Indonesia, 6*(2), 95–97.

97. Zubaedi. (**2011**). *Desain pendidikan karakter* (pp. 205–206). Kencana.