

## Strategic management of digital transformation in aqidah akhlak learning at islamic senior high schools

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### ABSTRACT

Technological developments encourage Islamic educational institutions to adopt digital learning models that remain grounded in Islamic values. This study examines the strategic digital transformation in the management of Aqidah Akhlak learning at Madrasah Aliyah Sunniyyah Selo. The research problem arises from the gap between the growing discourse of digital learning and its limited managerial implementation in Islamic educational institutions. Guided by organizational change theory and Islamic educational management principles, the study seeks to answer how digital transformation can be strategically formulated, implemented, and evaluated within the context of Aqidah Akhlak learning. Using a qualitative field research approach, data were collected through interviews, observations, and document analysis involving teachers, principals, and digital teams. The validity of the findings was tested through source triangulation. The findings reveal that the transformation process follows three key stages formulation, implementation, and evaluation supported by stakeholder collaboration and continuous improvement cycles. This digital transformation also shifted classroom interaction, positioning teachers as facilitators and students as active participants. The study reveals that effective digital transformation requires managerial alignment between leadership vision, teacher competence, and technological infrastructure. Theoretically, the study contributes to the literature on Islamic value-based digital learning by integrating managerial and pedagogical dimensions. Practically, it provides actionable insights for teachers, principals, and policymakers at the Ministry of Religious Affairs (Kemenag) on how to manage digital transformation effectively while preserving Islamic values. This research underscores that successful digitalization in Islamic education requires not only technological readiness but also moral, spiritual, and strategic alignment across institutional levels.

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### Introduction

Digital transformation is regarded as a process of integrating technological innovations with strategic approaches that drive significant changes across sectors and organizations (Wessel et al., 2021). In the field of education, the rapid advancement of science and technology in the era of the Fourth Industrial Revolution (Industry 4.0) has substantially shifted teaching paradigms for the millennial generation. This shift has given rise to the concept of Education 4.0, which emphasizes effective, adaptive, collaborative, and technology-based

learning methods(Jain et al., 2025). Digital technology has thus become an essential component of education(Laufer et al., 2021), increasingly integrated at various levels to facilitate learning and reduce educational disparities(Kristanto et al., 2024).

Under the supervision of the Ministry of Religious Affairs (MoRA) of the Republic of Indonesia, madrasahs have become the center of Islamic education reform through flagship programs such as Madrasah Reform: Realizing Education's Promise dan Madrasah Education Quality Reform (REP-MEQR) initiative(Menag Fachrul Razi, 2020). MoRA has introduced four key components to ensure the success of REP-MEQR, including the implementation of the electronic-based Madrasah Work Plan and Budget system (e-RKAM) and the strengthening of systems that support quality development(Nurhayati, 2023). One of the most prominent programs within REP-MEQR, aimed at improving educational quality and addressing the learning loss caused by the COVID-19 pandemic, is the development of the Madrasah Digital Learning (MDL) model(Budiono, 2025). Through this digitalization initiative, the government seeks to ensure that Islamic education in Indonesia is not left behind in harnessing technology for both learning and governance, while also providing a concrete response to the challenges of education in the digital era(Haddade et al., 2024).

According to national data, Indonesia's Digital Society Index (Indeks Masyarakat Digital Indonesia/IMDI) in 2024 reached a score of 43.34(Komdigi, 2024). indicating that, in general, Indonesian society has achieved a moderate level of proficiency in utilizing digital devices. Out of 38 provinces, one province Papua Pegunungan was categorized as low in IMDI, five provinces, including Central Java, were classified as high, while the remaining provinces fell into the moderate category. Consistent with this index, Central Java has ranked among the top ten provinces with the highest digital competitiveness over the past three years(Ventures, 2025). In 2023, the Provincial Government of Central Java launched a Smart Province initiative, which involved digital-based public services, the development of ICT infrastructure, and the implementation of a Digital School Bootcamp organized by the Provincial Office of Education and Culture to train teachers in the use of digital learning media.

When applied in madrasahs, digital transformation is not merely about providing hardware and software but also involves a paradigm shift in teaching and learning practices(Wessel et al., 2021). In the pursuit of quality improvement, educational management in the era of 4.0 also requires adjustments in curriculum design, human resources, and learning processes(Mahmudah & Putra, 2021). Although some Madrasah Aliyah have successfully integrated technology into their teaching systems, many still face considerable challenges. In Central Java in particular, limited budgets, low levels of digital competence among educators, and the unavailability of contextual and high-quality learning materials remain significant obstacles. These conditions highlight the need for a more strategic and inclusive managerial approach to ensure that digital transformation in madrasahs can be implemented equitably and sustainably.

Meanwhile, the current characteristics of Madrasah Aliyah students, particularly those born between 2007 and 2009 and beyond, fall into Generation Z (1997–2009)(Alit & Tejawati, 2023) and Generation Alpha (2010 onward). These generations are often referred to as digital natives, having interacted with technology from an early age(D'Acunto et al., 2025). They are accustomed to using games, social media, and various digital platforms in their daily lives. However, such competencies do not always correspond to their ability to utilize technology effectively for learning purposes(Prismanata & Sari, 2022). This condition presents a distinct challenge in channeling technological potential toward more meaningful educational goals, particularly in the domain of moral and character education (Aqidah Akhlak).

Theoretically, digital learning is believed to enhance the effectiveness, efficiency, and flexibility of the teaching and learning process(Laufer et al., 2021), particularly for generations accustomed to technology since birth. Digital competitiveness indices at the provincial level and the opportunities for digital transformation appear promising, offering appealing prospects for positive change. However, realities in the field reveal a gap between theory and practice. Students who are expected to adapt easily to digital-based learning often face difficulties in understanding content, struggle with concentration, and, in some cases,

experience moral degradation due to uncontrolled digital exposure (Anggainsi et al., 2025). Digital learning in Aqidah Akhlak therefore requires a pedagogical design that simultaneously addresses cognitive, affective, and psychomotor domains. Within the framework of Islamic education, values such as monotheism, honesty, responsibility, and respect for teachers and knowledge must be effectively transmitted through meaningful digital approaches that remain oriented toward the formation of the *insan kamil* (the ideal, holistic human being).

Strategic digital transformation in Islamic education requires an integrated approach that combines managerial planning, pedagogical innovation, and spiritual grounding. This study is guided by strategic management theory (David, 2011), which emphasizes structured processes of strategy formulation, implementation, and evaluation. Kurt Lewin's theory of organizational change, which frames transformation as a continuous cycle of unfreezing, changing, and refreezing (Hussain et al., 2018). The principles of Islamic education, according to al-Ghazali and Hasyim Asy'ari, uphold the centrality of moral and spiritual values in learning (Fuadi & Azis, 2025). By merging these frameworks, the research seeks to conceptualize digital transformation not merely as a technological shift but as a holistic process of institutional renewal rooted in Islamic ethics.

On the other hand, the subject of Aqidah Akhlak carries a significant mandate in shaping students into individuals who are faithful, virtuous, and possess an Islamic character (Nursya Sekar Tanti & Rofiqotul Aeni, 2022). In the digital context, new challenges arise in effectively conveying moral and spiritual values through technological media. Limited infrastructure, the abundance of digital content that contradicts Islamic values, and the weak ethical control within cyberspace pose serious threats to the internalization of moral values (Wahyono & Rofi'i, 2023). Therefore, innovation in digital-based Aqidah Akhlak learning must strike a balance between the appropriate use of technology and the integration of moral values and character strengthening. Teachers are not only expected to serve as technological facilitators but also as value guardians who instill noble character (*akhlaq karimah*) in every learning interaction (Salsabila et al., 2024).

Previous studies have highlighted a significant paradigm shift in Aqidah Akhlak learning in line with the development of the digital era. Kusumawati et al. (2021) emphasized the importance of aqidah and akhlaq values as a counterbalance to the negative impacts of digitalization, although their work remained largely conceptual (Kusumawati, 2021). Meanwhile, Fasihullisan et al. (2024) empirically found that the use of digital media is beneficial for Aqidah Akhlak teachers, yet challenges persist in terms of limited infrastructure, insufficient consideration of students' learning styles, and the absence of specialized platforms (Fasihullisan et al., 2024). These two studies affirm both opportunities and challenges in the digitalization of Aqidah Akhlak education but have not comprehensively addressed strategic approaches for implementing digital transformation in Madrasah Aliyah.

Although numerous studies have examined digital learning in Islamic education, most have focused primarily on pedagogical practices or technological adoption, while few have explored how digital transformation is strategically managed within Islamic schools, particularly in subjects that emphasize moral and spiritual formation such as Aqidah Akhlak. The present study seeks to fill this gap by examining how digital transformation can be strategically formulated, implemented, and evaluated within Aqidah Akhlak learning at Madrasah Aliyah, with a specific emphasis on character education grounded in Islamic values. Previous research indicates that the use of technology in Aqidah Akhlak education has often remained limited to conceptual or technical levels, whereas field observations reveal a persistent gap between the objectives of value-based education and the digitalization practices applied including the lack of contextual learning materials, non-adaptive pedagogical methods, and the diminishing role of teachers as value guardians in digital spaces.

This study focuses on MA Sunniyyah Selo, an Islamic high school that successfully launched the first digital class in Grobogan Regency. With its religious and innovative vision, the institution strives to integrate Islamic values with technological advancement and serves as a representative model of a rural madrasah transitioning from conventional to digital learning. Therefore, this research offers a novel strategic model of digital transformation that extends

beyond technological innovation by integrating moral, spiritual, and pedagogical dimensions to cultivate digitally literate yet ethically grounded Muslim students.

## Research Methods

This study employed a qualitative research design with a field research approach. This approach was chosen as it is appropriate for examining real-life phenomena intensively in their natural context (Feny Rita Fiantika, Mohammad Wasil, Sri Jumiyati, 2022). Field research provides a holistic understanding of the phenomena under study by allowing the researcher to be directly present at the research site and collect data as it emerges (Fenti Hikmawati, 2020). The study was conducted at MA Sunniyyah Selo, an Islamic senior high school (Madrasah Aliyah) under the auspices of the Sunniyyah Selo Foundation. Established in 1968, the institution is located within the complex of Ki Ageng Selo's tomb in Selo Krajan, Selo Village, Tawangharjo Subdistrict, Grobogan Regency (Selo, 2015).

In this approach, data were collected through field notes and interview transcripts (Nasution, 2023). The techniques employed included observation, interviews, and documentation. Observation was consistent with the chosen approach, as it involved the researcher's direct engagement in observing the phenomena under study (Pinto et al., 2024). Meanwhile, interviews were conducted to obtain in-depth information from participants, which was then aligned with the realities observed in the field. Interviews explored participants' perceptions, experiences, and challenges in implementing digital transformation. The research participants consisted of nineteen people: the principal, the vice principal in charge of curriculum, the head of the digital/CBT team, two Aqidah Akhlak teachers, and 14 students from the Smart Digital Class program. These participants were selected through purposive sampling based on their involvement and experience in the digital learning transformation process. Observations focused on classroom implementation, digital infrastructure, and teacher student interactions. Documentation was also utilized as supporting evidence to validate and strengthen the phenomena identified during the research process. Documentary data included lesson plans, e-modules, digital evaluation sheets, and institutional reports.

Data analysis was carried out using Miles and Huberman's framework, which consists of three main components: data reduction, data display, and conclusion drawing/verification (Nasution, 2023). In the data reduction stage, raw data from interviews, observations, and documentation were selected, focused, and simplified to ensure their relevance to the research focus, namely the digital transformation strategy in Aqidah Akhlak learning. Data display was presented in the form of descriptive narratives and summary tables, enabling readers to better understand the relationships between variables and the observed phenomena. Finally, conclusion drawing was conducted continuously throughout the research process, with findings verified through cross-checking among different data sources and referencing supporting theories.

The validity of the data in this study was ensured through technique triangulation, which involved comparing and confirming information obtained from different data collection methods to strengthen the credibility of the findings (Feny Rita Fiantika, Mohammad Wasil, Sri Jumiyati, 2022). To ensure trustworthiness, triangulation of techniques and sources was employed by comparing data from interviews, observations, and documents. Member checking was conducted by confirming key findings with participants to validate interpretations. An audit trail of research notes, recordings, and analytical memos was maintained for transparency. Ethical clearance was ensured by obtaining informed consent from all participants, guaranteeing confidentiality, and respecting institutional permissions from the school administration. Document analysis, in turn, served as administrative evidence and demonstrated the actual learning content being applied. By comparing these three sources, the researcher was able to identify consistency across the data, uncover discrepancies requiring further examination, and ultimately achieve a more comprehensive understanding of the studied phenomena.

This approach enabled the researcher to gain a deep, structured, and credible

understanding of the advantages, challenges, and implications of digitalizing Aqidah Akhlak learning at MA Sunniyyah Selo.

## Results and Discussion

### 1. Digital Transformation Strategy in the Management of Aqidah Akhlak Learning at MA Sunniyyah Selo

The term strategy originates from the Greek word meaning a high-level plan designed to achieve one or more goals under conditions of uncertainty. One of the outcomes of strategic planning at MA Sunniyyah Selo is a structured digital transformation initiative rooted in the institution's long-term vision. The school's vision emphasizes excellence in academic achievement, diligence in worship, noble character (akhlaqul karimah), and environmental awareness. During the formulation stage, leadership commitment played a central role. The principal of MA Sunniyyah Selo emphasized, "The vision of MA Sunniyyah Selo is to excel in achievement, be diligent in worship, and be environmentally conscious. Of course, to excel in achievement, we must always keep up with the times, especially in this current era, the digital era. Therefore, we equip our students with digital learning skills." This statement captures the core philosophy guiding the school's transformation: maintaining spiritual integrity while embracing innovation.

The initiative to establish the Smart Digital Class Program represents the practical translation of this vision, aligning with Schmitz et al (2023) view that transformational leadership in education requires a synthesis of moral purpose, strategic vision, and technological responsiveness (Schmitz et al., 2023). To realize the theme of academic excellence, MA Sunniyyah Selo introduced an innovative program called the "Outstanding Class Program," which involves the establishment of specialized classes based on students' areas of interest. Among these programs, the most prominent is the Smart Digital Class, marking the first digital classroom innovation introduced in Grobogan Regency (Selo, 2022).

To realize the digital transformation of Aqidah Akhlak learning at MA Sunniyyah Selo, the strategy was implemented through three structured stages. These stages consisted of strategy formulation, strategy implementation, and strategy control (evaluation) (Amnillah et al., 2023).

#### 1) Formulation of the Digital Transformation Strategy in the Management of Aqidah Akhlak Learning at MA Sunniyyah Selo

The formulation stage serves as the foundational phase in strategic planning (Rotua Basaria Sitorus, 2023). At this stage, all stakeholders of MA Sunniyyah Selo prepared for the launch of the Smart Learning Class program as part of the school's outstanding class initiative. Beginning with benchmarking activities and a needs analysis, the program was officially inaugurated in 2022 by the Head of the Ministry of Religious Affairs of Grobogan Regency. The role of the principal as a transformational leader was crucial, both in ensuring the availability of adequate facilities and in motivating teachers to master technology. This strategic foundation guaranteed that every step of the digitalization process was guided by clear direction, sufficient support, and appropriate resources.

**Table 1.** Strategy Formulation Process of Digital Transformation in Aqidah Akhlak Learning at MA Sunniyyah Selo

No.	Stage	Activities	Description
1.	Survey & Needs Analysis	Benchmarking Study	Identifying digital learning needs and the madrasah's existing conditions including infrastructure, teacher competencies, and student characteristics through a benchmarking visit to MAN 4 Kebumen.
		Team Formation	Forming a special team called the "Digital Team/CBT Team" to directly manage and oversee all operational activities related to digitalization.

		Infrastructure Inventory	Aligning infrastructure needs with the demands and conditions of the madrasah.
2.	Determination of Strategic Objectives	Setting Objectives	Determining the strategic objectives of digital learning, such as enhancing the understanding of tawhid and noble character, strengthening students' learning independence, and optimizing the role of teachers as facilitators.
3.	Selection of Platforms and Learning Media	Selection of Platforms and Media	Selecting platforms and applications for digital learning (OneNote, Canva, AI, ChatGPT, Gemini, Microsoft) and domain hosting for collaboration, as well as curating videos, e-books, and applications that comply with sharia principles as teaching materials.
4.	Stakeholder Engagement	Inter-Party Synergy	Involving teachers, the head of the madrasah, the school committee, and representatives of the digital team in formulating the plan, including discussions of needs, simulations of platform use, and the formulation of policies for digital media utilization.
5.	Human Resource Preparation	Selection of New Students	Screening and selecting new students using a CBT system with ODS to group them according to their interests, prior skills, and abilities.
		Teacher Training	Organizing training workshops and in-house training (IHT) programs facilitated by the institution, monitored directly by the CBT Team of MA Sunniyyah Selo.
		Parent Socialization	For parents whose children are selected for the digital class, a meeting is held to socialize and align the program, including the provision of laptops for the students.
6.	Work Plan Development	Timeline Preparation and Task Distribution	Preparing a work plan document that outlines the stages of implementation, the schedule of teacher training, trial periods, regular evaluations, and a clear division of tasks between members of the digital team and the teachers assigned to the digital class.

MA Sunniyyah Selo began the initial step of its digital transformation strategy by conducting a benchmarking visit to MAN 4 Kebumen. This stage aimed to assess the school's baseline conditions in terms of technological infrastructure readiness, teachers' ability to utilize digital tools, and the characteristics of students targeted by the program. Benchmarking provided a real picture of best practices, improvements in human resource quality, and served as a catalyst for institutional innovation and development (Purwanto, 2022). Through this process, the madrasah was able to identify gaps between its current state and the desired targets, thereby ensuring that the formulated strategy was both realistic and well-directed.

Once the needs were identified, the next step was the establishment of a Digital Team, also referred to as the Computer-Based Test (CBT) Team, responsible for managing all activities related to the digitalization of learning. This team consisted of teachers with technological competence, administrative staff, and representatives from the school's management. The formation of this team was crucial, as digital transformation requires cross-departmental coordination, ranging from the development of learning content and the management of hosting domains and CBT systems to the maintenance of technological equipment. The existence of a dedicated team also ensured that the implementation process was consistent and well-monitored, enabling both technical and pedagogical issues to be addressed promptly.

The infrastructure mapping stage was a crucial step before the implementation began. This process included an inventory of the devices available at the madrasah, such as touch screens, projectors, computers, and internet networks, along with the identification of additional needs. In the context of MA Sunniyyah Selo, this mapping

ensured that each classroom was equipped with at least the minimum facilities required to support digital learning, including stable internet connectivity. Detailed infrastructure mapping also enabled the school to allocate its budget more effectively and avoid unnecessary purchases of irrelevant equipment.

The next step was the formulation of strategic objectives for digital-based learning. These objectives had to be aligned with the vision and mission of the madrasah, which focus on nurturing students' *aqidah* (faith) and *akhlaq* (character). At MA Sunniyyah Selo, the main targets included enhancing students' understanding of the concepts of monotheism (*tauhid*) and noble character, strengthening their capacity for independent learning, and optimizing the role of teachers as facilitators of the learning process. Clear objectives served as a guideline for all stakeholders involved, ensuring that every digitalization activity had a definite and measurable direction.

After the objectives were formulated, the next step was the selection of platforms and learning media. This process considered not only technical aspects but also the compatibility of content with Islamic values. At MA Sunniyyah Selo, the platforms adopted for learning included AI, Gemini, Canva, Microsoft, and OneNote. In addition, learning media such as videos, e-books, e-modules, and the school's digital library application "PUSKARA" were utilized as supporting tools, carefully selected to ensure alignment with Islamic teachings. This decision guaranteed that the technologies employed would facilitate the internalization of Islamic values rather than contradict them.

As part of the utilization of technology in learning evaluation, MA Sunniyyah Selo adopted a Computer-Based Test (CBT) system. This system was developed to support a more efficient, transparent, and objective examination process (Ismah Az Zahroh et al., 2024). The activation of the system involved installing CBT software on the school's server, configuring the local network, and synchronizing it with the computers or laptops used by students.

The final stage of the planning process was the active involvement of stakeholders and the formulation of a detailed work plan. Stakeholders included the principal, teachers, the school committee, administrative staff, and the Digital/CBT Team. Their engagement was facilitated through coordination meetings, group discussions, and simulations of learning platform usage. The outcome of this process was a formal work plan document containing the schedule for teacher training, timelines for digital class trials, mechanisms for periodic evaluation, and clear task distribution among members of the digital team. Through this participatory approach, all parties developed a sense of ownership over the program, thereby ensuring sustained commitment to the implementation of the strategy.

## 2) Implementation of Digital Transformation Strategy in the Management of *Aqidah Akhlak* Learning at MA Sunniyyah Selo

The implementation stage is a crucial phase that determines the success of the entire planned transformation process and presents significant challenges (D et al., 2020). At this stage, MA Sunniyyah Selo mobilized all its resources, both human and technological, to realize effective digital-based *Aqidah Akhlak* learning rooted in Islamic values. The implementation was carried out in a structured manner to ensure that every step produced a tangible impact on the quality of learning.

The stages of implementing the digital transformation strategy at MA Sunniyyah Selo include:

### a) Activation of the Digital System

The initial stage of implementing the digital transformation strategy at MA Sunniyyah Selo began with the activation of the digital system, which encompassed the entire technological infrastructure for learning. This process included preparing and synchronizing hardware such as touch screens, interactive projectors, computers, and high-speed internet networks, as well as

installing platforms to support teaching and learning activities. In addition, integration with various supporting applications such as Canva and CorelDRAW was carried out to enhance collaboration, alongside the use of the digital library as an additional reference source. The activation of this system was a key step to ensure technical readiness before proceeding to the stages of content development and the structured implementation of digital learning.

b) Development and Uploading of Digital Content

Learning content became the core element of the digital transformation, and therefore its development was carried out under the principles of creativity as well as compliance with sharia. Aqidah Akhlak teachers designed materials in the form of interactive videos, infographics, and PDF modules that visualized abstract concepts such as the attributes of Allah and noble moral values. Before being uploaded, all content underwent a manual verification process, aligned with official textbooks and classical Islamic references (kitab salaf), to ensure that no elements contradicted Islamic teachings. The materials were then scheduled for upload prior to face-to-face sessions, in line with the flipped classroom concept that positions students as active learners (Meilisa & Pernanda, 2020).

c) Implementation of Digital Learning

This stage represented the actual application of the concepts and plans that had been designed. The learning process was conducted through a combination of face-to-face sessions and classroom discussions utilizing interactive digital media. Teachers guided students in reviewing the material they had previously studied independently, then facilitated discussions to deepen their understanding of key concepts. In the subject of Aqidah Akhlak, this method allowed students greater flexibility to ask questions, share perspectives, and connect the material with real-life experiences.

d) Assistance and Monitoring

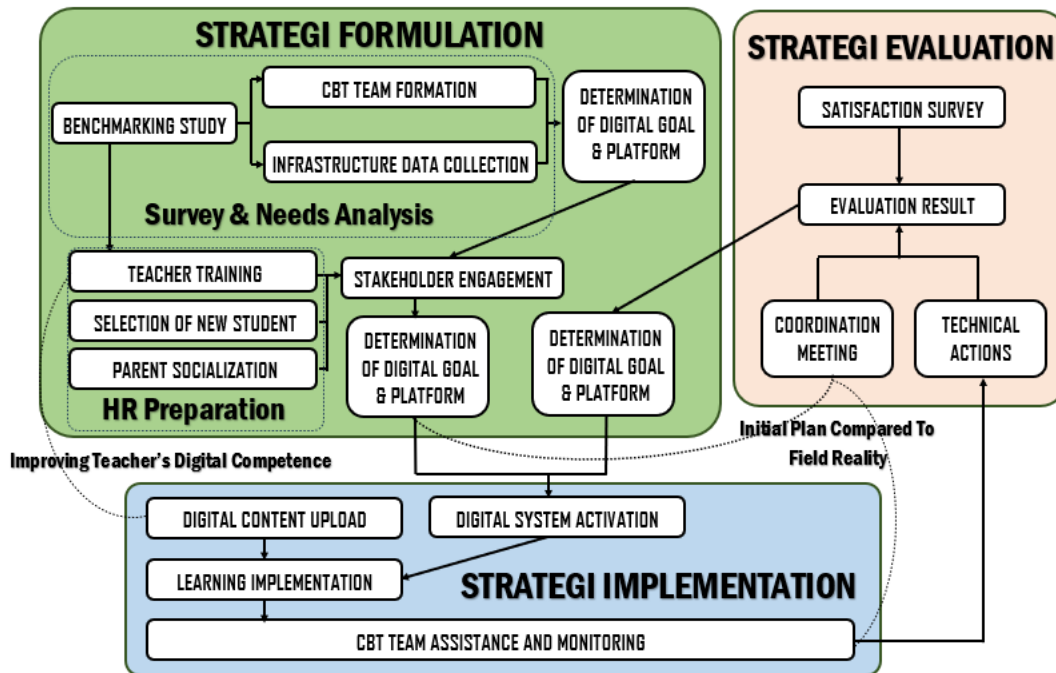
To ensure the effectiveness of digital learning, intensive mentoring was provided by the school's digital team to both teachers and students. Teachers offered prompt feedback on students' assignments and questions, ensuring that no gaps in understanding remained. The digital team was responsible for monitoring the operation of digital systems and providing technical support whenever issues arose. The principal was also directly involved in periodic supervision, not only to oversee the technical continuity of the program but also to ensure that Islamic values were consistently internalized in every digital learning activity

3) Evaluation of Digital Transformation Strategy in the Management of Aqidah Akhlak Learning at MA Sunniyyah Selo

The evaluation stage of the digital transformation strategy at MA Sunniyyah Selo focused on assessing the overall effectiveness of the digitalization of learning. Evaluation was carried out by comparing the strategic plans formulated during the planning phase with their realization in practice. This process involved analyzing the achievement of key indicators, such as the extent of digital media utilization by teachers and students, the smooth operation of digital devices, and the consistency in applying discussion-based methods and the flipped classroom approach.

The principal, together with the digital team, held regular coordination meetings to discuss achievements, technical challenges, and non-technical barriers such as teacher readiness and student engagement. In addition, satisfaction surveys involving teachers, students, and parents were conducted to measure perceptions of the benefits and quality of the implemented digital transformation. The evaluation results were then used as the basis for strategic improvements, including adjustments in resource allocation, enhanced training programs, and the optimization of learning platform

features. Through this approach, evaluation not only assessed the success of implementation but also ensured the sustainability and relevance of the Smart Learning Class program in addressing the educational needs of Generation Z and Generation Alpha within the framework of Islamic education.



Graphics 1. Scatter Plot

The conceptual model of the digital transformation strategy in Aqidah Akhlak learning at MA Sunniyyah Selo illustrates a structured managerial process, beginning with strategy formulation, followed by strategy implementation, and culminating in strategy evaluation. This sequence is complemented by a cyclical evaluation process, meaning that each evaluation outcome directly informs improvements in strategy formulation, which are subsequently tested again in the next implementation phase. Within the organization, this recurring cycle fosters continuous improvement (Nufuz et al., 2025) emphasizing that digital education strategies are not static but evolve in response to the dynamic needs of the madrasah, teachers' competencies, and technological advancements.

Theoretically, this model aligns with Kurt Lewin's organizational change theory, which emphasizes three critical stages: unfreezing, changing, and refreezing (Hussain et al., 2018). In the context of this study, the strategy formulation stage represents the unfreezing process, which raises awareness of the need for change through benchmarking, needs analysis, and the establishment of a digital team. The strategy implementation stage corresponds to the changing process, involving tangible transformations such as the uploading of digital content, the adoption of the flipped classroom approach, and mentoring for teachers and students. The evaluation stage reflects the refreezing process, in which learning outcomes are reviewed, stakeholder satisfaction is assessed, and strategies are refined to become more contextual and sustainable. However, unlike the traditional linear model, this framework is spiral in nature, as evaluation results continuously trigger new cycles of strategic improvement.

Compared with previous studies such as Silviana et al. (2021) and Fashihullisan et al. (2024), this research extends the discussion by presenting a value-integrated managerial model for digital transformation in Islamic schools. The model demonstrates how visionary leadership, pedagogical innovation, and moral orientation can coexist in rural educational contexts.

## 2. Digital Pedagogical Design and Integration of Islamic Values in the Digitalization of Aqidah Akhlak Learning at MA Sunniyyah Selo

### 1) Learning Objectives and Core Islamic Principles

The digitalization of Aqidah Akhlak learning at MA Sunniyyah Selo is designed not only to facilitate students' understanding but also to shape them into Muslims with strong character. The primary goal of Aqidah Akhlak education is to develop students' personalities as reflected in their daily behavior and patterns of thought (Yandrizal et al., 2023). Within the context of digitalization, Aqidah Akhlak aims to enhance students' digital literacy so that they can utilize technology for constructive purposes, while simultaneously reinforcing Islamic values to ensure they maintain a solid moral foundation amidst the vast flow of information (Susetiyo, 2024). In this regard, technology is positioned as a supportive tool for learning success serving as a medium to clarify subject matter, enrich learning resources, and expand access to information without displacing spiritual values as the central focus of education (Lestari, 2018).

The core Islamic principles upheld in this approach are tawhid as the foundation of faith, akhlaq karimah as the guide for behavior, and Islamic adab as the ethical framework for interaction, both in real life and within digital spaces (Afdhalurrahman & Sapri, 2025). Teachers emphasize that although the mode of instruction has shifted to a digital-based approach, the substance of the teachings must remain intact. Every material, activity, and medium used is carefully filtered to ensure alignment with Islamic values. Thus, digital learning in this context is not merely "modern" from a technological perspective, but also remains relevant, educational, and imbued with spiritual value (ibadah).

### 2) Learning Models

MA Sunniyyah Selo applied a combination of Contextual Learning and the Flipped Classroom as the primary instructional models in the digitalization of Aqidah Akhlak subjects. Contextual Learning was utilized to help students connect abstract concepts such as iman, ihsan, and akhlaq with real-life situations in their environment (Akbar, 2015). For instance, when discussing proper conduct in using social media, teachers facilitated students in identifying real cases and analyzing them through the lens of Islamic teachings. This model rendered the material more engaging, relevant, and immediately applicable in students' daily lives.

The Flipped Classroom model enhanced the effectiveness of learning by reversing the conventional learning pattern. Students first studied the material at home through videos, e-modules, or other digital resources, and then came to class for discussion, questioning, and deeper exploration of the content (Meilisa & Pernanda, 2020). This approach not only made face-to-face sessions more interactive but also provided greater opportunities for teachers to guide students in comprehending Islamic values at a deeper level. A student shared, "The digital class model is enjoyable because the facilities are adequate, and it helps me understand the material faster." This testimony reflects how digital infrastructure and interactive media increased both motivation and comprehension. As a result, students became better prepared, more active, and more critical in every learning session.

### 3) Digital Media and Learning Resources

Teachers utilized a wide range of digital media, from Artificial Intelligence (AI) technologies such as ChatGPT and Google Gemini for information exploration, Canva for designing visual materials, Microsoft Office for document creation and management, to OneNote for collaborative note-taking. The adoption of AI-based tools greatly assisted teachers in developing adaptive and contextual learning materials, while Canva and OneNote strengthened the creative and collaborative aspects of students' learning. Learning resources were drawn from various references, including official madrasah e-modules, AI platforms, and Puskara (the digital library of MA Sunniyyah Selo).

Teachers developed interactive e-modules and multimedia resources to enhance comprehension while safeguarding Islamic authenticity. As one Aqidah Akhlak teacher noted, "To explore the subject of faith and morals, teachers must first cross-check the material by combining it. This is to ensure that it is in accordance with the scriptures and with the opinions of the scholars of the past. Of course, we must cross-check this manually." This practice highlights the school's commitment to maintaining scholarly integrity and moral accountability amid technological adaptation by preserving the purity of the Aqidah Akhlak learning materials..

4) Value Integration Strategies

The integration of Islamic values in digital learning was systematically carried out through three main approaches. First, every digital learning material was accompanied by relevant Qur'anic verses or Hadith, enabling students to understand the shar'i foundation of each topic. Second, teachers incorporated case studies that reflected the application of Islamic values in daily life, such as ethics in using social media or proper etiquette in online interactions. Third, students were encouraged to engage in reflection, either orally during class or through digital assignments, to assess the extent to which they had applied the teachings in their own lives.

5) Interaction Patterns

Digital transformation has brought significant changes to the interaction patterns in Aqidah Akhlak classrooms. Prior to digitalization, teachers served as the primary source of information while students tended to remain passive listeners (PUSDASI, 2024). At present, teachers act as facilitators who guide the learning process, while students take on the role of active participants who are willing to ask questions, engage in discussions, and contribute their perspectives. This shift has made classroom dynamics more vibrant and collaborative.

In addition, assessments that were previously limited to oral or written formats are now reinforced through digital activities, allowing student engagement to be measured more comprehensively. The once-dominant lecture method has been complemented with interactive learning, utilizing visual media, online quizzes, and simulations. As a result, the interaction between teachers and students has improved not only in quantity but also in quality, as the discussions that take place have become more meaningful and contextualized to students' real-life experiences.

6) Learning Evaluation

Evaluation was conducted by combining project-based assignments, online quizzes, and Computer-Based Tests (CBT). In its summative evaluation, MA Sunniyyah Selo has already implemented digital examinations using mobile phones, where an anti-cheating application was applied in collaboration with the CBT team. Teachers were trained on how to upload questions and automatically match answers within the digital system. The adoption of digital assessment has had a tangible impact on the efficiency and effectiveness of the evaluation process (Darmayanti et al., 2024).

### 3. Implications and Advantages of Digitalizing Aqidah Akhlak Learning at MA Sunniyyah Selo

This study contributes to the literature on digital learning based on Islamic values, particularly in the context of Aqidah Akhlak learning in madrasahs. The findings reinforce the theory that digital transformation is not merely about adopting technology, but must also be accompanied by the internalization of spiritual and moral values. By integrating Contextual Learning and the Flipped Classroom approach into Aqidah Akhlak subjects, this study adds a new perspective to the academic discourse on how technology can be used to strengthen tawhid, akhlaq karimah, and Islamic adab. This emphasizes the need to expand the body of literature on Islamic value-based digital learning in order to comprehensively address the educational challenges of digital-native generations.

The findings of this study provide several practical recommendations. For teachers, it emphasizes the importance of mastering digital literacy while simultaneously acting as value guardians in digital spaces. Teachers need to develop adaptive pedagogical skills to effectively use digital media without neglecting the substance of Islamic values. For madrasah principals, the study suggests strengthening managerial strategies in digital transformation, including the provision of infrastructure, continuous professional development for teachers, and the establishment of structured digital teams. Meanwhile, for the Ministry of Religious Affairs (Kemenag), this research recommends the expansion of the Madrasah Digital Learning policy, not only focusing on technological aspects but also promoting the integration of moral, spiritual, and Islamic character values into digital curricula. Thus, digital transformation in madrasahs can be implemented sustainably, strategically, and in line with the core vision of Islamic education.

The implementation of digital learning at MA Sunniyyah Selo offers several advantages, ranging from improved accessibility of learning materials and the reinforcement of moral values to the development of 21st-century skills. Students become accustomed to mastering various digital tools and applications, including graphic design platforms (Canva, CorelDraw), document management software (Microsoft Office, OneNote), and Computer-Based Testing (CBT) systems for evaluation. The use of digital media enables abstract concepts in Aqidah Akhlak to be more easily understood and connected to real-life contexts, making the learning process more meaningful and relevant. Another strength lies in the modern classroom facilities, such as individual writing desks and air-conditioned learning spaces, which provide students with a comfortable and conducive environment that supports focus and productivity.

Despite creating a more interactive and engaging learning atmosphere, the digitalization strategy still faces several constraints. First, limited financial resources restrict the madrasah from fully converting all classrooms into digital learning spaces. Second, teachers' digital competencies remain uneven, with some experiencing difficulties in operating technological devices and developing innovative Islamic-based learning content. Third, parental involvement in supporting digital learning is still suboptimal, particularly in providing devices for students. Therefore, the digitalization strategy at MA Sunniyyah Selo requires continuous improvement to overcome these challenges and ensure long-term sustainability.

## Conclusion

The digital transformation in Aqidah Akhlak learning at MA Sunniyyah Selo has proven to enhance the effectiveness of the teaching and learning process while strengthening the internalization of Islamic values. This study concludes that the digital transformation of Aqidah Akhlak learning at MA Sunniyyah Selo is a strategic and value-oriented process that integrates technological innovation with Islamic moral principles. The transformation progressed through three interrelated stages: formulation, implementation, and evaluation, guided by visionary leadership, collaborative management, and continuous reflection. The Smart Digital Class Program not only improved learning efficiency and engagement but also strengthened students' moral and spiritual awareness through the integration of contextual learning, flipped classroom methods, and Islamic value-based content verification. Supported by digital media such as AI (ChatGPT, Gemini), Canva, Microsoft Office, OneNote, as well as verified e-modules and the Pusaka digital library, facilitates the understanding of abstract concepts, broadens access to information, and ensures the authenticity of content aligned with Islamic values.

Theoretically and practically, this research contributes to the development of Islamic value-based digital learning by formulating a managerial model rooted in Islamic educational management. It demonstrates that successful digital transformation requires not only technological readiness but also strategic leadership and moral alignment. Teachers are encouraged to strengthen digital literacy while remaining value guardians; school leaders must design sustainable strategic plans supported by capacity-building and digital teams; and policymakers, particularly within the Ministry of Religious Affairs (Kemenag), should ensure equitable infrastructure development in rural madrasahs and promote the integration of

Islamic values within digital curricula.

In strengthening the future of Islamic digital education, several key recommendations are proposed. Madrasahs should formulate Digital Transformation Roadmaps that align technology integration with their Islamic vision and conduct regular internal evaluations to ensure sustainability. Continuous teacher development in digital pedagogy and value integration must be institutionalized through structured training or collaboration with universities. At the policy level, the Ministry of Religious Affairs (Kemenag) is encouraged to expand the Madrasah Digital Learning (MDL) program, with a focus on rural inclusion, ethical digital literacy, and the preservation of Islamic identity. Furthermore, cross-institutional research collaboration should be promoted to refine and validate models of Islamic digital learning through empirical studies. Ultimately, the case of MA Sunniyyah Selo illustrates that digital transformation in Islamic education is not merely technological innovation, but a spiritual evolution that harmonizes faith, ethics, and innovation to cultivate morally grounded, digitally literate learners.

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