



Digital Transition Management: Strategies for Islamic Universities in the Early Stages of Implementing Academic Information Systems

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ABSTRACT

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The implementation of the Academic Information System (SIKAD) in Islamic private higher education institutions frequently encounters managerial habits, technical constraints, and human resource readiness challenges. Within Islamic Education Management principles, digital transformation is not merely a technical upgrade but a strategic tool to realize Itqan (professionalism) and Amanah (accountability). This study aims to analyze the digital transition management strategy applied during the initial implementation phase of SIKAD at Sekolah Tinggi Agama Islam (STAI) Nurul Ilmi Tanjungbalai. Utilizing a qualitative approach with a descriptive case study design, data were collected through deep interviews, observations, and documentation involving institutional leaders, IT managers, lecturers, administrative staff, and students. The findings reveal that digital transition management relies on three core pillars: (1) strategic planning rooted in institutional amanah to mitigate change resistance, (2) structured mentoring-based training (one-on-one coaching) to build professional competence (itqan), and (3) operational policy reform based on digital governance standards. Extensive narrative evidence from various stakeholders confirms that bridging cultural readiness and fostering transformational-spiritual leadership are more critical than software deployment alone. This study concludes that the success of the initial digital transition depends significantly on leadership ability to synthesize digital innovation with Islamic organizational culture.

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INTRODUCTION

The integration of Information and Communication Technology (ICT) into the governance of modern higher education has shifted from merely an option for efficiency to a strategic requirement for sustainability (Al-Ansi et al., 2021). Private Islamic Higher Education Institutions (PTKIS) in developing regions,

such as the Nurul Ilmi Islamic College (STAI) in Tanjungbalai, face complex challenges as they transition from paper-based, manual administration to an integrated Academic Information System (SIKAD). This transition often triggers two main challenges: a lack of readiness in technical infrastructure and organizational resistance to change among stakeholders. (Baharuddin & Rahmawati, 2020). The gap between the need for digitization outlined by national quality policies and the actual capacity of local institutions has become a social reality that requires carefully planned transitional management interventions.

From the perspective of Islamic Education Management (MPE), the process of leadership and governance in higher education institutions is not merely understood as a mechanical set of activities involving planning, organizing, directing, and controlling. More than that, digital transition management serves as a strategic instrument for realizing the fundamental principles of Islamic teachings in the governance of educational institutions, namely Amanah (accountability and public transparency), Itqan (professionalism, perfection, and precision), and Maslahah (the common good) (Manurung et al., 2026). Failures in implementing SIKAD at PTKIS are often not caused by software errors but rather by a lack of mitigation against conservative work habits and the absence of a digital culture aligned with Islamic work ethics. (Riyanto & Setiawan, 2022).

Most previous studies have tended to focus on evaluating end-user satisfaction or server infrastructure performance at large, well-resourced universities, thereby leaving a knowledge gap regarding the dynamics and patterns of adoption at regional private universities with limited resources during the early stages of implementation (Mukti, 2022; Fatim, 2022). To address this academic gap, this study aims to comprehensively analyze and describe the formulation of a digital transition management strategy during the initial stages of SIKAD implementation at STAI Nurul Ilmi Tanjungbalai. The novelty of this study lies in the formulation of a local digital transition model that integrates the values of transformational-spiritual leadership with the ADKAR (Awareness, Desire, Knowledge, Ability, Reinforcement) conceptual approach to change management within the framework of coastal PTKIS institutions (Hiatt, 2006; Manurung et al., 2026). The author argues that the success of the early stages of the digital transition in regional Islamic educational institutions is determined by a balance between cultural and spiritual persuasion aimed at fostering operational awareness and consistent compliance with administrative regulations.

METHOD

This study employs a qualitative approach with a descriptive case study design to explore in depth the process of digital transition management at STAI Nurul Ilmi Tanjungbalai (Creswell, 2012; Creswell & Creswell, 2018). The selection of the location was conducted using purposive sampling, based on the consideration that the institution was in the critical phase of the initial integration of the SIKAD system from a manual system. Research subjects and informants

were selected using purposive sampling, which included institutional leadership (the Chair and First Vice Chair for Academic Affairs), the head and technicians of the Information Technology (IT) Unit, representatives of tenured faculty, academic administrative staff, and student leaders of student organizations who directly interact with the SIAKAD services.

Primary data collection was conducted through in-depth interviews using a semi-structured guide to explore the perceptions, personal experiences, obstacles, and strategies for managing the transition among leaders and administrators. Passive participatory observation was also employed to observe the workflow of the study plan card service and the daily entry of grades. Meanwhile, secondary data were obtained through a review of internal regulations, Standard Operating Procedures (SOPs), SIAKAD technical guidelines, and a summary of student grade migration data. All collected data were analyzed using the interactive technique proposed by Miles, Huberman, and Saldana (2014), which includes the stages of data reduction, data display, and drawing conclusions. The validity of the findings was tested using triangulation of data sources and collection techniques to ensure the reliability of the research findings.

RESULT AND DISCUSSION

Result

Based on a comprehensive field investigation at STAI Nurul Ilmi Tanjungbalai, the implementation of the initial phase of digital transition management is divided into four areas of empirical findings, supported by a network of in-depth narratives from all levels of the academic community.

Strategic Leadership, Needs Assessment, and Mitigating Cultural Anxiety

In the early stages of the transition, the institution's leadership realized that the greatest obstacle to digital migration lay not in the complexity of system programming, but rather in psychological resistance and conservative work habits. The First Vice Chair for Academic Affairs at STAI Nurul Ilmi Tanjungbalai described the reality on the ground regarding the psychological dynamics that emerged during the pre-implementation phase:

"Our biggest challenge at the start of this SIAKAD migration was actually not the provision of the application itself, but rather the work habits that had been comfortably established over many years of manual processes. Some senior faculty members and administrative staff were concerned that the new system would be complicated, time-consuming, and would require a restructuring of their roles. Therefore, our initial approach was a persuasive outreach campaign grounded in the institution's core values of integrity. We emphasized that this digitization is an effort to maintain transparency and efficiency. SIAKAD is not intended to create difficulties or impose strict oversight, but rather to ensure the accuracy of our campus's academic data so that it meets national higher education quality standards."

The IT Unit followed up on these persuasive measures by assessing infrastructure readiness and identifying the level of operational digital literacy. The Head of the IT Unit and the Systems Administrator provided technical insights regarding the challenges of large-scale data migration in the initial phase:

"In the first few months, we were faced with a chaotic mess of student data, which had previously been scattered across dozens of manual spreadsheets and paper documents. Many student ID numbers were out of sync, and past grade data had not been neatly compiled. We had to conduct a marathon data-cleaning effort while simultaneously building a load-balanced local server infrastructure. We realized that if the initial data were entered incorrectly into SIAKAD, the legitimacy of this new system would immediately be called into question by faculty and students alike."

Customized Technical Mentoring (One-on-One Mentoring) and Senior Faculty Adaptation

The training was not implemented using a rigid instructional approach, but rather through a personalized mentoring model that adapts to the range of lecturers' digital competencies. A senior lecturer in charge of the course shared how his personal perspective had shifted during the mentoring period:

"Honestly, during our first semester using SIAKAD, we were a bit confused when it came to entering final grades and selecting the weighting for each component. We were used to submitting physical printouts to the academic office, but suddenly we had to log in and enter the data ourselves. We were afraid that if we clicked the wrong button, the students' grade data would be corrupted or lost. Luckily, the IT team was willing to sit right next to us, patiently guiding us through each step. When we forgot our passwords or encountered input errors late at night, the support team responded promptly. After entering data two or three times, we realized this system is incredibly helpful. We can monitor attendance charts and grade summaries in real time without worrying about losing any assessment sheets."

This proactive technical support succeeded in breaking down the barrier of fear of technology among educators, transforming skepticism into a long-term commitment to its use.

Administrative Operational Efficiency and Staff Workload Transformation

From the perspective of day-to-day administrative management, the implementation of SIAKAD has fundamentally changed the workload of academic operations staff. A member of the Academic Administration Department described the stark contrast between the old way of working and the new system:

"Before SIAKAD was introduced, every time the course registration and transcript distribution periods rolled around, the administration office would be

crammed with stacks of paper forms. We had to verify the handwritten signatures of academic advisors one by one and retype thousands of grades into the campus records. The risk of typing errors was very high, and our time was consumed solely by physical record-keeping. Now, our role has shifted to that of system verifiers. Once professors upload grades and academic advisors approve course registration forms on the portal, the system automatically processes them. The time we used to spend on repetitive administrative tasks can now be redirected toward improving the quality of other student services."

Student Experience and Improving the Quality of Academic Services

The implementation of SIAKAD has had a direct impact on students' interaction patterns and learning experiences. A student representative described both the operational ease and the technical challenges encountered during the initial phase of use:

" In the past, if we wanted help with course registration or needed a provisional transcript, we had to wait in long lines at the academic office, print out forms, and track down our academic advisors on campus. When SIAKAD was first launched, there were indeed some issues with the system being slow (or down) because thousands of students accessed it simultaneously on the first day course registration opened. However, after the issue was reported and the system was optimized by the university, the course registration process can now be completed in a matter of minutes via cell phone. We can also transparently monitor our GPA summaries each semester. This is extremely helpful for students, especially those who are studying while working or living far from campus."

To provide a clearer overview of the empirical findings by stakeholder group, a comprehensive breakdown is presented in Table 1.

**Table 1: Summary of Empirical Findings on the Digital Transition
Management of SIAKAD**

Subject/Informant	Perceptions & Initial Challenges	Transition Strategies/Interventions	Impact & Final Results
Leadership (First Vice Chair)	Concerns about the complexity of the system and resistance to changing manual habits.	Persuasive outreach grounded in the institutional value of trust.	The development of collective awareness and regulatory compliance.

IT & Operator Unit	Scattered manual data and student ID number discrepancies (data cleaning).	Centralized data cleansing & provision of load-balancing infrastructure.	The realization of an accurate and valid academic database integration.
Senior Lecturer	Concerns about data entry errors or data loss, as well as confusion regarding grade weighting.	Regular one-on-one technical coaching.	Improving digital literacy (Itqan) & facilitating real-time grade tabulation.
Administrative Staff	The workload is piling up due to the verification of hard copies and retyping.	A shift in role from manual data entry to system verifier.	Improved service efficiency and reduced paper-based record-keeping bureaucracy.
College Student	Long lines for course registration counseling and server errors during peak traffic times.	Optimizing server capacity and accessibility via smartphones.	Easy access to your course registration form (KRS) and GPA from anywhere (Maslahah).

Discussion

The integration of the narrative and the findings matrix in Table 1 provides strong empirical confirmation of the theoretical synthesis of change management and leadership in Islamic organizations. The institutional leadership's policy of prioritizing persuasive dialogue grounded in institutional trust before implementing strict regulations validates the ADKAR (Awareness, Desire, Knowledge, Ability, Reinforcement) change management framework proposed by Hiatt (2006). Fostering awareness and the desire for change grounded in Islamic leadership values such as *uswah hasanah* (setting a good example) must precede the enforced transfer of knowledge and ability. (Manurung et al., 2026).

From the perspective of the Technology Acceptance Model (TAM) by Davis (1989), the dynamics of SIAKAD acceptance at STAI Nurul Ilmi Tanjungbalai highlight the close interaction between two key constructs: perceived ease of use and perceived usefulness. Accounts from senior faculty members reveal that perceived ease of use does not arise naturally from the application's interface but is cultivated through managerial interventions in the form of personalized technical coaching (one-on-one coaching). In the context of MPI, this relentless coaching effort is a tangible manifestation of the *Itqan* principle (professionalism and precision). Institutional leaders do not merely demand change; rather, they provide the means—knowledge and ability—so that the entire academic community can work to high professional standards.

On the other hand, feedback from students and administrative staff confirms an increase in the perceived benefits. The reduction of bureaucratic red tape in the course registration process and the elimination of the need to manually retype grade data provide concrete evidence that digital technology offers tangible functional value for the common good (*maslahah*). To provide a systematic overview of the interactions among variables within this integrated framework, the digital transition strategy flowchart is presented in Figure 1

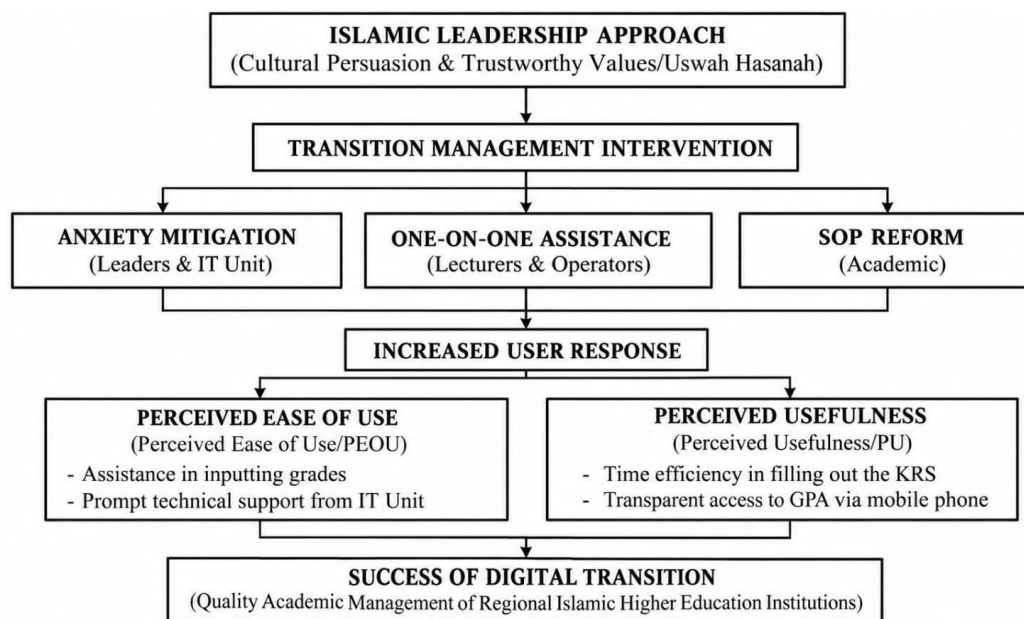


Figure 1: Diagram of the Integration of Change Management and Value-Based Leadership in the Digital Transition of the SIAKAD System at STAI Nurul Ilmi Tanjungbalai

CONCLUSION

Digital transition management during the initial phase of implementing the Academic Information System (SIAKAD) at STAI Nurul Ilmi Tanjungbalai was successfully carried out through the integration of three main pillars: strategic needs mapping based on the values of trust and integrity, phased training based on personalized mentoring (itqan), and adjustments to the institution's operational regulations. The success of this initial phase was shaped by a combination of transformational-spiritual leadership and a religious organizational culture approach that minimized resistance to change and improved the digital literacy of the academic community. Firsthand accounts from academic leaders, IT managers, faculty members, administrative staff, and students confirm that patient technical guidance and a clear understanding of the system's benefits were the key factors in overcoming cultural barriers. This study offers practical implications that regional private universities need to prioritize people-centered change management, the internalization of Islamic ethical values in the workplace, and intensive technical support alongside the preparation of ICT infrastructure. As a recommendation, institutional leaders are advised to continue strengthening the reliability of digital data security and to conduct periodic evaluations of user satisfaction to ensure the long-term sustainability of academic data integration.

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