

THE ROLE OF LEADERSHIP AND DIGITAL CULTURE IN ENHANCING ORGANIZATIONAL SUSTAINABILITY IN HIGHER EDUCATION: A CASE STUDY AT UNIVERSITAS KRISTEN INDONESIA TOMOHON

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ABSTRACT

This study explores the interaction between leadership, digital culture, and organizational sustainability within the context of digital transformation at Universitas Kristen Indonesia Tomohon (UKIT), a faith-based higher-education institution in Eastern Indonesia. Employing a qualitative case study design, data were collected through in-depth interviews with 15 key informants, strategic document analysis, and observational notes. Thematic analysis revealed that value-driven transformative leadership serves as the central catalyst for digital adoption, with senior leaders actively modeling digital practices and framing technology as an extension of the Christian mission and service. The concept of "digitalization with heart" emerged as a powerful narrative that reduced resistance and fostered moral legitimacy among stakeholders. While digital culture remains in transition, generational differences and structural barriers are gradually being addressed through communities of practice and meaning-making processes that align innovation with the institutional identity. The integration of religious values into digital initiatives enabled a unique form of cultural alignment, distinguishing UKIT from secular transformation models. The impact on organizational sustainability is evident across the academic, operational, financial, and social dimensions, including improved graduation rates, reduced paper dependency, cost savings, and expanded outreach to marginalized communities. The findings suggest a reciprocal relationship among leadership, culture, and sustainability, forming a context-sensitive model of digital transformation grounded in ethical commitment and a shared vision. This study contributes to the literature by demonstrating how resource-constrained institutions can achieve sustainable digital change through holistic, value-based, and participatory approaches. It also offers practical insights for leaders of faith-based and regional universities navigating digital evolution.

INTRODUCTION

The rapid advancement of digital technologies has fundamentally reshaped the operational and strategic landscapes of higher-education institutions worldwide. Digital transformation is no longer an optional pathway but a critical imperative for academic relevance and institutional resilience (Gull et al., 2024; Mohamed Hashim et al., 2022; Nkomo & Kalisz, 2023). Universities are increasingly expected to integrate digital tools not only in teaching and learning but also in governance, research, and community engagement. This shift demands more than technological adoption; it requires a profound reconfiguration of the organizational culture and leadership paradigms. In this context, digital leadership has emerged as a pivotal force guiding institutions through complex transitions (Peng, 2022; Sacavém et al., 2025; Sułkowski, 2023; 게라나, 2023). It involves vision setting, resource allocation, and the cultivation of a shared digital ethos among stakeholders. Without strategic leadership, digital initiatives often remain fragmented and fail to have a systemic impact. Consequently, the interplay between leadership, culture, and sustainability has become a central concern in the evolution of modern university systems.

Higher education institutions are facing unprecedented challenges, including demographic shifts, financial constraints, and rising expectations for accountability and innovation. Amid these pressures, organizational sustainability has gained prominence as a multidimensional construct encompassing academic, operational, financial, and social dimensions (Abro et al., 2024; Ikram et al., 2020; Shafique et al., 2021). In this context, sustainability refers to the capacity of an institution to maintain its core mission while adapting to external disruptions and internal inefficiencies. Digital technologies offer transformative potential for enhancing this capacity through improved processes, data-driven decision-making, and expanded access to education (Elugbaju et al., 2024; Gade, 2021; Gonugunta & Leo, 2024). However, the realization of such benefits is contingent on more than just infrastructure investment. Cultural readiness and leadership commitment are equally critical in determining the success of digital integration (Ali & Amin, 2025; Elbably & Zayed, 2025; Jewapatarakul & Ueasangkomsate, 2024; Rütth & Netzer, 2020). A supportive organizational culture fosters innovation, collaboration, and adaptability, which are essential for long-term viability. Thus, understanding how leadership and culture interact to influence sustainability is vital for advancing institutions.

In Indonesia, the imperative for digital transformation in higher education has been reinforced by national policies such as the Merdeka Belajar Kampus Merdeka (MBKM) initiative and the push toward smart campus ecosystems (Kemdikbudristek, 2023). These policies encourage universities to embrace flexibility, digital literacy, and student-centered learning models. Private and faith-based institutions, including Christian universities, are actively engaging in this transformation while navigating unique contextual constraints. The integration of digital systems must align not only with academic goals but also with institutional values and religious identities. This dual imperative introduces additional layers of complexity to change management and strategic planning. Institutions such as Universitas Kristen Indonesia Tomohon (UKIT) face the challenge of balancing tradition with innovation in a resource-constrained environment. While digital adoption is progressing, its contribution to sustainable development remains underexplored. Therefore, a focused inquiry into the dynamics of leadership and culture in shaping sustainability outcomes is timely and necessary.

Despite the growing scholarly attention to digital transformation in higher education, much of the existing literature emphasizes technological infrastructure and pedagogical applications. Studies often highlight the implementation of learning management systems, online assessment tools, and blended learning models as indicators of progress (Bradley, 2021; Kumar et al., 2021; Lubis et al., 2022). However, these analyses frequently overlook the organizational conditions that enable or hinder sustained digital integration. Leadership is occasionally mentioned as a facilitator, but rarely examined in depth regarding its role in shaping cultural norms and strategic direction

(Peyravinejad et al., 2025; Plaku & Leka, 2025; Shaked et al., 2021). Similarly, organizational culture is treated as a background variable rather than a dynamic force that interacts with leadership practices (Besley & Persson, 2024; Mutonyi et al., 2022). There is a notable absence of research systematically investigating how leadership behavior influences the emergence of a digital culture. Even fewer studies have explored how this interaction directly affects long-term institutional sustainability. Consequently, there remains a significant gap in understanding the socio-organizational mechanisms behind successful digital transformation.

Moreover, most empirical studies on digital leadership originate from Western, well-resourced universities, limiting their applicability to institutions in developing contexts. These settings often operate under different governance models, funding mechanisms, and cultural expectations that influence how leadership is enacted and perceived (Jakobsen et al., 2022; Kidanemariam, 2021; Nabella et al., 2022). Indonesian higher education institutions, particularly private and faith-based institutions, are underrepresented in the global discourse on digital transformation. Their unique value systems, such as Christian ethical principles, may shape leadership approaches and cultural dynamics in ways that are not captured by dominant theoretical frameworks. For instance, servant leadership or value-based decision-making may play a more prominent role than transactional or technocratic models (Dhiman & Kumar, 2020; Mayer et al., 2023; Robinson et al., 2022). However, the current literature seldom accounts for such contextual nuances in analyzing digital change processes. This lack of contextual sensitivity risks producing generalized recommendations that fail to resonate with local realities of the region. Consequently, there is a pressing need for contextually grounded research that captures the specific leadership and cultural aspects of Indonesian Christian universities.

Another critical gap lies in the conceptual fragmentation between digital transformation, organizational culture, and sustainability. While each domain has been studied independently, their intersection remains under-theorized and empirically underexplored. Research on organizational sustainability in higher education often focuses on environmental practices or financial stability, neglecting the role of digital innovation as a sustainability driver (Mohamed Hashim et al., 2022; Peter et al., 2023; Singun, 2025). Conversely, studies on digital culture rarely link cultural attributes to long-term institutional resilience (Isensee et al., 2023; Junaedi et al., 2023; Liu et al., 2023; Muadzah & Suryanto, 2024; Nielsen et al., 2023). The absence of integrative frameworks prevents a holistic understanding of how digital leadership fosters a culture that supports enduring institutional health. Furthermore, the dynamic interplay between top-down leadership and bottom-up cultural change remains poorly understood. Without such frameworks, university leaders lack actionable insights to align digital initiatives with broader sustainability goals. Bridging these conceptual silos is essential for advancing theory and practice in sustainable higher education. A more nuanced interpretive approach is needed to uncover the underlying processes that shape digital transformation in real-world settings.

Additionally, methodological limitations characterize most existing research in this domain. Quantitative studies dominate the field, prioritizing measurable outcomes over a deep contextual understanding. Surveys and statistical models, while useful for identifying correlations, often fail to capture stakeholders' lived experiences and interpretive processes. Qualitative insights into how leaders inspire change, how resistance is negotiated, and how cultural shifts unfold over time are frequently lacking. Even mixed-methods studies tend to subordinate qualitative data to quantitative findings, reducing the richness of the narrative evidence. This methodological imbalance limits the depth of understanding required to explain complex organizational phenomena. Consequently, the mechanisms through which leadership and culture jointly influence sustainability remain unclear. A more nuanced interpretive approach is needed to uncover the underlying processes that shape digital transformation in real-world settings. Hence, there is a compelling need for qualitative case studies that explore these interrelationships in real institutional settings.

Therefore, a consolidated research gap lies in the lack of in-depth, context-sensitive studies that examine the interplay between leadership, digital culture, and organizational sustainability in faith-based higher-education institutions in Indonesia. The existing literature fails to provide a comprehensive model that connects strategic leadership with cultural evolution and long-term institutional resilience. Moreover, there is insufficient empirical evidence on how Christian values and local institutional contexts mediate the digital transformation process. The absence of case studies from institutions such as UKIT further exacerbates this knowledge deficit. Without such studies, policymakers and university leaders lack the contextual intelligence required to design effective interventions. Theoretical models developed in secular or Western contexts may not adequately represent the sociocultural dynamics at play. This gap not only limits academic understanding but also hampers practical efforts to achieve a sustainable digital transformation. Hence, there is a compelling need for qualitative case studies that explore these interrelationships in real institutional settings.

This study addresses the aforementioned gaps by offering an original, contextually grounded investigation into the interaction between leadership, digital culture, and sustainability at a Christian university in Eastern Indonesia. Unlike previous studies that treat these constructs in isolation, this study adopts an integrative perspective, positioning leadership and culture as co-constitutive forces in shaping sustainable outcomes. This study contributes to the literature by developing a nuanced understanding of how leadership practices cultivate a digital culture that supports long-term institutional viability. Furthermore, it introduces the role of religious and ethical values as mediating factors in digital transformation, a dimension that is largely absent in current scholarship. By focusing on UKIT, this study provides rare empirical insights from a geographically and institutionally underrepresented context. The findings are expected to enrich the theoretical discussions on sustainable higher education in diverse cultural settings. This study also challenges the dominance of technocentric narratives by emphasizing the human and organizational dimensions of digital change. As such, it offers a fresh lens through which to view the sustainability of educational institutions in the digital era.

The primary objective of this study is to examine the nature and dynamics of the interaction between leadership, digital culture, and organizational sustainability within the context of Universitas Kristen Indonesia Tomohon (UKIT). It seeks to understand how leadership behavior influences the development of a digital culture and how this culture, in turn, supports institutional sustainability. This study explores both the formal and informal mechanisms through which leaders communicate their vision, allocate resources, and foster innovation. It also investigates the cultural norms, values, and practices that enable or constrain digital adoption and adaptation. By analyzing interviews, documents, and observational data, this study aims to reconstruct the lived experience of digital transformation at UKIT. Special attention is given to how Christian institutional values intersect with digital innovation and sustainability. The ultimate aim is to generate actionable knowledge for university leaders navigating similar transformational journeys. This understanding will contribute to both academic discourse and practical strategies for sustainable digital development in higher-education.

METHOD

This study employs a qualitative case study design to explore the interactions between leadership, digital culture, and organizational sustainability at Universitas Kristen Indonesia Tomohon (UKIT) in Indonesia. The case study approach is particularly suitable for investigating complex social phenomena within their real-life contexts, allowing for an in-depth understanding of how leadership practices shape cultural dynamics and contribute to long-term institutional resilience (Alyakhri & Abuashour, 2025; Suriyankietkaew et al., 2022; Syamsir et al., 2025). UKIT was selected as a single instrumental case because of its unique positioning as a Christian higher-education institution

undergoing digital transformation in a geographically and socioeconomically distinct region of Indonesia. This study focuses on how leadership decisions, institutional values, and cultural responses converge to influence sustainability outcomes in the digital era. By concentrating on one bounded case, this research provides rich, contextualized insights that are transferable to similar faith-based and resource-constrained institutions. The design adheres to the principles of interpretive inquiry, emphasizing meaning-making, stakeholder perspectives, and processual understanding over generalization.

Data were collected from multiple sources to ensure triangulation and enhance the trustworthiness of the findings. Primary data were gathered via semi-structured interviews with 15 key informants, including senior leaders (rektor, wakil rektor, dekan), academic staff, IT administrators, and unit managers responsible for digital initiatives. Interview protocols were developed based on a review of theoretical frameworks related to digital leadership (Weber et al., 2022), organizational culture (Gledson et al., 2024), and sustainable universities (Gledson et al., 2024) to ensure alignment with the research questions. Each interview lasted between 45 and 70 minutes, was conducted in Bahasa Indonesia, audio-recorded with consent, and transcribed verbatim. Secondary data included institutional documents, such as strategic plans, digital transformation roadmaps, annual reports, and internal policy guidelines. These documents were analyzed to contextualize the interview narratives and validate the alignment between formal strategies and lived practices. Observational notes from digital training sessions and leadership meetings were also incorporated to enrich the data.

The analysis followed a thematic analysis approach, involving six iterative phases: familiarization with the data, initial coding, searching for themes, reviewing themes, defining and naming themes, and producing the report. Transcripts were coded using NVivo 14 software to systematically manage the data and ensure consistency across the coding cycles. Open coding was first applied to identify salient concepts, followed by axial coding to group related codes into broader thematic categories such as "visionary leadership," "cultural resistance," and "sustainability through digital efficiency." Themes were continuously reviewed and refined through team discussions to minimize any interpretive bias. The final thematic framework was mapped against the research questions to elucidate the patterns of interaction between leadership, culture, and sustainability. Special attention was given to disconfirming evidence to strengthen analytical rigor and avoid selective interpretation.

To ensure methodological rigor, this study applied several trustworthiness criteria: credibility, transferability, dependability, and confirmability. Credibility was enhanced through prolonged engagement, member checking (by sharing preliminary findings with two participants), and peer debriefing with the academic colleagues. Transferability was supported by thick, descriptive accounts that allowed readers to assess the applicability of the findings to other contexts. Dependability was maintained through an audit trail documenting all research decisions, data collection procedures and analytical steps. Confirmability was achieved by maintaining a reflexive journal to acknowledge the researchers' positionalities, particularly regarding their assumptions about digital progress and religious institutional values. Ethical clearance was obtained from the Institutional Review Board, and informed consent, anonymity, and data confidentiality were strictly upheld throughout the research process.

RESULTS AND DISCUSSION

Result

This study aims to uncover the interaction between leadership, digital culture, and organizational sustainability at Universitas Kristen Indonesia Tomohon (UKIT) in the context of digital transformation. Using a qualitative case study approach, data were collected through in-depth interviews with 15 key informants, analysis of strategic institutional documents, and limited observations of the digitalization processes across the campus. The findings reveal that the transformative leadership of the rector and senior management has become the central driver

in advancing technological adoption and shaping the institutional direction of digital change. Leaders do not merely function as decision-makers but also as change agents who actively communicate the digital vision through internal forums, strategic meetings, and technology-based leadership training. On multiple occasions, the rector has emphasized the importance of digitalization with heart, a phrase reflecting the integration of technological innovation with Christian values such as service, compassion, and sustainability. This approach has successfully established moral legitimacy for digital change, reducing resistance among faculty and staff who were initially skeptical of technological shifts.

Leadership at UKIT is characterized by direct involvement in the planning and implementation of digital systems rather than delegating responsibility solely to the IT unit. A notable example is the rector's decision to allocate 18% of the 2023–2024 annual budget specifically for digital infrastructure development, faculty training and digitization of academic processes. This decision was not made in a top-down manner but emerged from intensive consultations with the deans, program coordinators, and administrative staff representatives. In interviews, an academic vice-rector stated, "Leaders must be pioneers, not just supervisors. If we ourselves do not actively use the LMS or e-simak system, how can we expect other lecturers to do so?" This leadership pattern reflects a distributed leadership model in which digital authority and responsibility are strategically shared with leaders at the faculty and unit levels. Document analysis showed that faculties led by deans with high digital literacy adopted new systems 2.3 times faster than those led by deans with limited technological training. This indicates that leadership effectiveness is determined not only by formal position but also by digital competence and innovation commitment.

The digital culture at UKIT is still in transition, with varying levels of readiness across the units. In general, administrative staff demonstrate faster adaptation than academic staff, particularly in using systems such as SIAKAD, e-office, and digital attendance applications. However, among lecturers, a clear generational divide is evident: younger faculty (under 45 years) tend to be enthusiastic and proactive in adopting technology, while senior lecturers (over 55 years) continue to rely on conventional methods and require intensive support to use technology. Interviews revealed that the primary barriers are not only technical skill gaps but also the perception that digitalization threatens pedagogical autonomy and increases workload. One senior lecturer remarked, "I feel constantly monitored. Every assignment must be uploaded and every class recorded. It makes the teaching atmosphere rigid." Nonetheless, there are signs of a cultural shift toward collaboration and shared learning, particularly through communities of practice facilitated by the university's teaching development center. Internal records indicate that lecturer participation in digital training programs increased from 42% in 2022 to 76% in 2024, reflecting a positive trend in the formation of digital culture.

The role of religious values in shaping digital culture emerged as a key finding of this study. At UKIT, digital transformation is not framed as a secular or technocratic process but as a form of modern service aligned with the Christian mission. Strategic documents such as the 2020–2030 Strategic Plan explicitly describe digitalization as "a tool to expand educational access for marginalized communities" and "an expression of stewardship over the gifts of knowledge and technology." Such narratives help reframe digital change from a perceived threat to a value-based opportunity. In several interviews, lecturers stated that they now view LMS usage as a form of "digital ministry" to students, particularly those from remote areas in North Sulawesi. This approach successfully creates a shared meaning that connects technological change with institutional identity. However, structural challenges remain, including the absence of formal incentives for digitally innovative lecturers and bureaucratic hierarchies that sometimes hinder communication across units. Despite these limitations, there is a consensus among the participants that UKIT has moved beyond initial resistance and entered a phase of guided acceptance.

The impact of leadership and digital culture on organizational sustainability is evident in four dimensions: academic, operational, financial, and social. Academically, the digitization of learning processes has improved the quality and consistency of student assessments through integrated e-assessment systems. Data show that on-time graduation rates increased from 68% in 2021 to 79% in 2024, attributed to data-driven academic monitoring.

Operationally, administrative digitization has reduced dependence on paper-based documentation by 65%, aligning with the UKIT's commitment to an environmentally friendly campus. Processes such as registration, leave applications, and performance evaluations are now almost entirely conducted online, reducing the average processing time from five days to 1.2 days. Financially, process efficiency and reduced printing and distribution costs saved approximately IDR 1.4 billion annually in administrative expenditures. These funds have been reallocated to digital scholarship programs and the development of virtual labs.

Social sustainability has improved significantly. Online learning platforms enable students from island regions, such as Sitaro and Sangihe, to attend classes despite transportation limitations. Additionally, the UKIT has launched a "Digital Mission" program, offering free digital literacy training to Sunday school teachers and youth leaders in rural communities. This initiative not only extends the university's social impact but also strengthens its relevance within the local society. In interviews, a foundation chairperson stated, "Sustainability is not just about survival, but about making a difference. Digitalization helps us fulfill this mission more effectively." Nevertheless, long-term sustainability challenges persist, particularly regarding system maintenance, technological updates, and succession planning for digital leadership. Several informants expressed concern that overreliance on key leaders could jeopardize digital initiatives if leadership transitions occur without clear succession strategies.

The interaction between leadership, digital culture, and sustainability is shaped by complex and mutually reinforcing dynamics. The findings reveal a nonlinear, cyclical, and context-dependent relationship. Visionary leadership drives the creation of progressive digital policies, which, in turn, creates space for digital culture to evolve. Over time, a more open and innovative culture strengthens leadership legitimacy and accelerates system adoption. In this cycle, sustainability is not the final outcome but an ongoing iterative process. A notable finding is that Christian values, such as humility, service, and stewardship, function as a cultural bridge, integrating technological change with institutional identity. This distinguishes UKIT from secular universities, where digital change is often perceived as a bureaucratic imposition. At UKIT, digitalization is accepted not because of regulatory pressure but because it is linked to established moral and spiritual values.

Based on these findings, the researchers propose a conceptual model of interaction consisting of three core elements: (1) value-based transformative leadership, (2) inclusive and reflective digital culture, and (3) multidimensional organizational sustainability. These elements interact through reciprocal reinforcement, with each influencing and being influenced by the others. The model is not intended to be universal but is highly relevant to faith-based higher-education institutions in Eastern Indonesia. The uniqueness of this finding lies in the integration of the spiritual, social, and technological dimensions in transformation processes, a combination rarely explored in the international literature. The results also demonstrate that digital success is not determined solely by budget or infrastructure but by leadership quality and the depth of cultural transformation. Thus, the UKIT exemplifies how resource-constrained institutions can achieve digital sustainability through holistic, value-driven, and participatory approaches.

Discussion

The findings of this study underscore the pivotal role of value-based transformative leadership in driving digital transformation in the context of faith-based higher education. Unlike technocratic leadership models that prioritize efficiency and control, the leadership observed at UKIT integrates moral vision with strategic action, positioning digital change as an extension of the institutional mission. This aligns with Siahaan and Harefa's (2021) argument that servant leadership in Christian universities fosters trust and collective ownership during organizational change. The rector's emphasis on "digitalization with heart" reflects a deliberate effort to humanize technological adoption, countering the perception of digital systems as impersonal or intrusive. By framing digital initiatives as acts of service and stewardship, UKIT leaders have successfully cultivated a sense of ethical purpose that transcends operational necessity. This moral framing appears to have mitigated resistance, particularly among older faculty

members who value the relational and spiritual dimensions of education. This study contributes to the literature by demonstrating how leadership in religious institutions can leverage spiritual narratives to legitimize innovation. This finding challenges the assumption that digital transformation is inherently secular or value-neutral, suggesting that it can be deeply contextualized within institutional ethos.

The distributed nature of digital leadership at UKIT further reinforces the effectiveness of this value-driven approach. Rather than centralizing control within the IT department or top management, authority and accountability are shared across faculty and unit leaders, enabling local adaptation and ownership. This model resonates with Weber et al., (2022) concept of distributed digital leadership, which emphasizes collaborative decision-making and capacity building across organizational levels. The data show that faculties with digitally literate deans adopted new systems significantly faster, indicating that leadership proximity to academic units enhances the success of implementation. This suggests that digital transformation is not merely a technical process but a socio-managerial one, dependent on leadership presence and engagement at various levels. The success of this model at UKIT highlights the importance of investing in leadership development beyond central administration. This implies that sustainability in digital transformation requires a network of committed leaders, not just a single visionary at the top. These insights are particularly relevant for small- and medium-sized institutions with limited resources, where scalability depends on decentralized initiatives and trust.

The gradual evolution of digital culture at UKIT reveals the complex interplay between generational dynamics, professional identity, and institutional support. While administrative staff adapted quickly to digital tools, many senior lecturers expressed concerns about surveillance, workload, and pedagogical autonomy issues that echo the findings of Khalil et al. (2023) in their study of faculty resistance in Southeast Asian universities. The perception that digital monitoring undermines academic freedom is not unique to UKIT but reflects a broader tension between accountability and autonomy in higher-education institutions. However, the emergence of communities of practice and reframing of digital tools as “ministry” suggest that cultural change is possible when aligned with professional and spiritual identities. Unlike institutions where digital adoption is enforced through compliance, UKIT has fostered internalization by connecting technology to meaningful job roles. This supports Laukka et al., (2021) argument that digital culture is not imposed but co-constructed through a shared understanding and mutual support. The increase in training participation from 42% to 76% over two years indicates a cultural shift in progress, although not yet fully consolidated. This suggests that cultural transformation is a long-term process that requires continuous reinforcement and recognition.

The integration of Christian values into the digital narrative at UKIT represents a distinctive and powerful mechanism of cultural alignment. By positioning digitalization as a tool for inclusivity and service to marginalized communities, the university has transformed a technical initiative into a moral imperative for the university. This approach is consistent with Skerrett, (2023) observation that sustainability in higher education is most effective when linked to institutional identities and ethical commitments. The “Digital Mission” program, for instance, extends the university’s outreach beyond the campus, reinforcing its social role and spiritual mission. Such initiatives create a feedback loop: digital tools enable mission-driven activities, which, in turn, strengthen institutional legitimacy and commitment to technology. This differs from secular institutions, where digital sustainability is often framed in economic or environmental terms alone. At UKIT, sustainability is a spiritual and social concept rooted in the idea of diakonia (service). This finding expands the conventional understanding of digital culture by introducing faith-based meaning-making as a catalyst for innovation and acceptance. This suggests that cultural readiness for digital transformation can be enhanced by aligning technology with deeply held values.

The multidimensional impact of digital transformation on organizational sustainability at UKIT demonstrates that technological adoption, when well led and culturally embedded, yields benefit across academic, operational, financial, and social domains. The 11% increase in on-time graduation rates linked to data-driven academic monitoring illustrates how digital systems can enhance educational quality and student success. This finding supports the assertion

of (Polly et al., 2021) that digital transformation serves as a driver of academic sustainability by improving institutional responsiveness and student support. Operationally, the 65% reduction in paper use not only cuts costs but also advances environmental responsibility, contributing to the university's green campus vision. Financial savings of IDR 1.4 billion annually have been reinvested in digital scholarships and virtual labs, creating a self-reinforcing cycle of innovation and equity. Socially, the extension of learning access to remote island communities exemplifies how digital platforms can fulfill the institutional mission of inclusion. These outcomes collectively illustrate that sustainability is not a single outcome, but a network of interrelated achievements. The UKIT case challenges the narrow view of sustainability as environmental or financial, advocating for a holistic framework that includes academic and social dimensions.

A critical insight from this study is the cyclical and reciprocal relationship between leadership and culture and sustainability. Rather than a linear sequence in which leadership drives culture, which then enables sustainability, the data reveal a dynamic feedback loop in which each element continuously shapes and is shaped by the others. For example, successful digital initiatives enhance leadership credibility, which, in turn, strengthens cultural buy-in, leading to further innovation and sustainability gains. This aligns with (Oliveira et al., 2021) model of interactive digital maturity, which emphasizes non-linear progression in organizational transformation. However, the absence of formal incentives for digital innovation suggests that intrinsic motivation, fueled by values and mission, plays a more significant role than extrinsic rewards in this context. This contrasts with the findings in corporate settings, where performance-based incentives are common drivers of digital adoption. In faith-based institutions, purpose often outweighs reward, indicating different motivational logic. Therefore, the sustainability of digital change may depend more on cultural and ethical alignment than on structural incentives. This has important implications for change management strategies in value-driven organizations.

The proposed conceptual model of value-based transformative leadership, inclusive digital culture, and multidimensional sustainability offers a context-sensitive framework for understanding digital transformation in faith-based higher-education institutions. Unlike generic models developed in Western secular contexts, this framework explicitly incorporates spiritual and ethical dimensions as core components of change. It does not replace existing models but complements them by adding layers of cultural and religious specificity. For instance, while Glowaa et al. (2023) emphasized leadership and culture, they did not account for how religious identity mediates these factors. The UKIT case demonstrates that values are not background conditions but rather active agents in transformation. This model may be particularly applicable to other Christian, Islamic, or faith-affiliated institutions undergoing digital changes in Indonesia and similar regions. It also provides a counter-narrative to the technocratic discourse that dominates the digital transformation literature. By centering values, the model repositions technology as a means to an end, rather than an end in itself.

The success of UKIT in achieving digital sustainability, despite resource constraints, challenges the assumption that transformation requires massive investment. While infrastructure and funding are important, this study shows that leadership vision, cultural alignment, and strategic prioritization can compensate for limited financial capacity. The allocation of 18% of the annual budget to digital initiatives, though significant, was feasible due to prioritization rather than abundance. This suggests that sustainability is as much about strategic choices as it is about financial capacity. Institutions with limited resources can achieve transformation by focusing on high-impact areas and leveraging internal motivation. The case also highlights the importance of long-term planning, as seen in the alignment of digital goals with the 2020-2030 Strategic Plan. Therefore, sustainability is not accidental but intentional, requiring coherence between vision, strategy, and action.

Leadership succession emerges as a critical vulnerability in the sustainability of digital transformation. Although current leaders are deeply committed and digitally engaged, the lack of a formal succession plan poses risks to continuity. If digital momentum depends heavily on individual leaders, institutional resilience may weaken during such transitions. Therefore, a sustainable model must institutionalize digital leadership through structured

development programs and shared governance mechanisms. This includes mentoring future leaders, documenting best practices, and embedding digital competence into leadership criteria. Without such measures, the progress achieved may not endure beyond the current government. Thus, this study calls for a shift from leader-dependent to system-dependent transformation. Only then can digital sustainability become truly organizational rather than personal.

The role of bureaucracy in enabling or hindering digital change is another nuanced finding. While hierarchical structures ensure policy consistency, they occasionally slow cross-unit collaboration and innovation. This reflects the tension between formal governance and agile digital practices. In some cases, approval processes delayed the deployment of new tools, frustrating faculty members eager to experiment. However, the same structures provide stability and accountability, preventing fragmented or uncoordinated initiatives. The challenge lies in balancing control with flexibility, a balance that the UKIT is still negotiating. Future efforts should focus on creating hybrid governance models that maintain oversight and encourage bottom-up innovation. This could include digital innovation committees with faculty representation or sandbox environments for piloting new technology. The goal is not to dismantle the bureaucracy but to make it more adaptive. In this way, institutions can maintain order without sacrificing agility.

The generational divide in digital adoption underscores the need for differentiated support. While younger staff adapted quickly, older faculty required sustained mentoring and reassurance that digital tools would not replace their expertise. The use of peer mentors and internal champions proved effective at UKIT, suggesting that change is best led by trusted colleagues rather than external consultants. Institutions should avoid one-size-fits-all training and design tiered programs based on digital literacy and teaching roles. Recognizing and validating non-digital contributions can also reduce anxiety and foster a willingness to learn. Over time, such approaches build confidence and reduce the perception of technology as a threat to the user. The ultimate goal is not universal digital proficiency but meaningful integration that enhances teaching practice rather than disrupts it. This human-centered approach is essential for an inclusive transformation.

The framing of digital tools as “digital ministry” represents a powerful example of meaning-making in organizational change. By connecting technology to spiritual identity, UKIT has transformed a technical process into a form of service, thereby increasing intrinsic motivation and commitment. This aligns with Siahaan and Harefa’s (2021) finding that Christian values enhance organizational cohesion during changes. When faculty members view their work as part of a larger mission, they are more likely to embrace new methods. This contrasts with institutions where digital adoption is framed as compliance or efficiency, potentially leading to superficial use. The success of this narrative suggests that change communicators must speak the language of institutional identity to be effective. In faith-based settings, this means using theological and ethical references to explain such shifts. Such framing does not replace technical training but complements it by addressing the “why” behind the change in the curriculum. In this context, meaning is a catalyst for sustained engagement.

Although context-specific, the proposed model offers transferable insights for other institutions facing similar challenges. Its emphasis on values, distributed leadership, and multidimensional sustainability can be adapted to different cultural and religious contexts. For example, Islamic universities might frame digitalization as *khidmah* (service to the community), whereas Catholic institutions could use *caritas* (charity) as a guiding principle. The core idea that digital transformation must be culturally and ethically grounded is universally applicable to all countries. Even secular institutions can benefit from linking technology to their core missions, whether excellence, equity, or innovation. Thus, the model serves as a template for context-sensitive change, not a rigid prescription. Future research should test its applicability in diverse institutional settings in the future. This would help refine the model and expand its theoretical contributions.

This study demonstrates that sustainable digital transformation in higher education is not solely a technical endeavor but also a deeply human and cultural one. Leadership, values, and institutional identity are not peripheral factors but are central determinants of success. The UKIT case illustrates how a small Christian university in Eastern

Indonesia has achieved significant progress by aligning digital initiatives with its mission and community. This challenges the dominant narratives that equate transformation with scale, speed, or spending. Instead, it highlights the power of purpose, patience and participatory leadership. For scholars and practitioners, the findings offer a compelling alternative to technocratic models of change. Sustainability, in its fullest sense, emerges not from systems alone but from the synergy between people, purpose, and process. This is the enduring lesson from UKIT's journey.

CONCLUSION

This study reveals that the success of sustainable digital transformation in higher education institutions is determined not primarily by technological infrastructure or financial capacity, but by the quality of leadership and the depth of cultural change. At Universitas Kristen Indonesia Tomohon (UKIT), transformative leadership grounded in Christian values, such as service, humility, and stewardship, has served as the central force driving meaningful technology adoption. Leaders did not merely design policies but actively modeled digital practices, thereby creating moral legitimacy that reduced resistance among staff and faculty. The application of distributed leadership extends influence beyond the central administration, enabling localized adaptation and shared ownership of digital initiatives. These findings affirm that effective digital leadership is not measured by formal authority alone but by direct engagement, technical competence, and alignment with the institutional mission. Thus, leadership at UKIT does not operate as a centralized hierarchy but as a dynamic, participatory network. Such leadership becomes the foundation for enduring change, particularly in institutions that operate under resource constraints.

The digital culture at UKIT remains in a phase of evolution, but it clearly demonstrates a shift from resistance to meaning-based acceptance. Transformation did not occur through bureaucratic enforcement but through reframing digitalization as a form of modern ministry and a response to the stewardship of knowledge. The integration of religious values into the digital narrative successfully created a shared meaning that connected technological change to institutional identity. Despite ongoing challenges such as generational divides, perceived workload increases, and limited formal incentives, rising participation in training programs and the emergence of communities of practice indicate a positive momentum. This inclusive and reflective digital culture serves as a bridge between innovation and tradition and between efficiency and ethical purpose. The findings show that organizational culture is not a passive barrier but an active agent that shapes the trajectory of transformation. In this context, digital sustainability is not merely about functional systems but about people who are engaged, understand the purpose of change, and feel a sense of ownership over it.

The interaction between leadership, digital culture, and organizational sustainability at UKIT forms a holistic, reciprocal, and contextually embedded dynamic relationship. These three elements do not operate in isolation but continuously reinforce one another in an evolving cycle: leadership initiates cultural change, culture enables sustainability, and sustainability strengthens leadership legitimacy. The outcomes are evident in improved academic performance, operational efficiency, financial optimization and expanded social impact. These findings contribute a context-sensitive conceptual model relevant to values-based institutions, particularly in Eastern Indonesia: value-driven transformative leadership, inclusive digital culture, and multidimensional sustainability. This model offers a counter-narrative to the dominant technocentric discourse by placing human meaning, ethical purpose, and institutional missions at the core of transformation. For similar institutions, UKIT exemplifies how resource limitations need not be a barrier when guided by a clear vision, principled leadership, and a culture of continuous reflection and shared commitment.

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