Collaborative Management as a Catalyst for Artificial Intelligence Adoption in Elementary Education: A Case Study

R Ridawati[1*], H Hidayat[2]

[1]Universitas Islam Nusantara, Bandung, Indonesia
[2]Universitas Jenderal Achmad Yani, Bandung, Indonesia
*Corresponding Email: ridayakubazmil@gmail.com

Abstract. Islamic education institutions in Indonesia navigate a complex landscape, balancing the imperative to preserve spiritual-ethical values (adab) with the demand to foster critical, emancipatory consciousness for the 21st century. This tension is further complicated by rapid digital integration. This article employs a descriptive-narrative qualitative approach, synthesizing philosophical frameworks from Al-Attas, Freire, and Habermas with contemporary studies on institutional management. The analysis reveals that transformative leadership, utilizing strategic planning (e.g., SWOT), functions as a critical mediator. Findings indicate that successful integration models reframe digital technology not merely as an administrative tool but as a pedagogical space. This space must be infused with adab and ecopedagogical values to prevent dehumanization and alienation. This article proposes a synthesized framework of digital adab, which merges emancipatory goals with ethical-spiritual grounding, suggesting a pathway for holistic quality improvement and the cultivation of transformative 21st-century competencies.

Keywords: Transformative Leadership, Islamic Education, Digital Integration, Emancipatory Pedagogy.

1   Introduction

The contemporary educational landscape is defined by a profound paradox. On one hand, globalization and digitization promise unprecedented connectivity and access to information; on the other, they are frequently implicated in social fragmentation, epistemological crises, and the erosion of local wisdom [1], [2]. This tension is particularly acute for religious educational institutions, which are mandated not only to equip students with functional competencies but also to cultivate a deep-seated ethical and spiritual identity. In Indonesia, the world's largest Muslim-majority nation, Islamic education institutions (from *madrasah* to *pesantren*) stand at this critical juncture [3]. They face the dual challenge of addressing the crisis in Islamic education as articulated by scholars like Syed Muhammad Naquib Al-Attas—a crisis of knowledge divorced from its spiritual roots [1]—while simultaneously embracing the call for transformative education that emphasizes the critical, creative, and collaborative skills necessary for the 21st century [4].

The philosophical underpinnings of this challenge are vast. The conceptual framework of Al-Attas, for instance, posits that true education is the inculcation of *adab*—a term that transcends mere etiquette to signify the recognition and acknowledgment of one's proper place in relation to God, society, and nature [5]. This *adab*-based pedagogy is inherently rooted in the epistemology of *Tawhid* (the Oneness of God), which serves as an integrating principle for all knowledge. From this perspective, the secularizing tendencies of global education are not merely a peripheral threat but a fundamental epistemological challenge that risks de-Islamizing the Muslim mind [1]. This view demands a curriculum that is holistic, integrated, and profoundly ethical, linking, for example, ecological consciousness directly to spiritual principles.

Conversely, the discourse on modern pedagogy is heavily influenced by critical and emancipatory traditions, most notably the work of Paulo Freire and Jürgen Habermas. For Freire [6], education is never neutral; it is either a tool for domination (the banking concept) or a practice of liberation. This emancipatory consciousness (*conscientização*) is achieved through dialogical, problem-posing education that empowers learners to critically read their world and act upon it. Similarly, Habermas's [7] theory of communicative action provides a framework for understanding education as a process of achieving mutual understanding through rational discourse, free from distortion and coercion [7]. These philosophies advocate for an educational model that is critical, democratic, and oriented toward social justice.

Historically, these two streams of thought—the *adab*-based internalist focus and the *liberation-oriented* externalist focus—have often been treated in parallel, if not in opposition. The perceived tension lies in reconciling education as the transmission of established spiritual-ethical order (*adab*) with education as the critical deconstruction of social-political orders (emancipation). However, as argues in a synthesis of Freire and Habermas, the goals of liberation and rational communication are not antithetical to a spiritually grounded worldview but can be seen as necessary components of a fully realized human consciousness [6].

This philosophical tension manifests in practical, managerial challenges for school leaders. The mandate for quality improvement in an increasingly competitive environment necessitates robust strategic planning. School management must adopt strategic approaches, such as SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, to navigate their institutional context and enhance educational quality [8]. This managerial imperative is further complicated by the rapid and often uncritical integration of digital technologies. While digital innovation promises to enhance learning quality and student engagement [9], it also introduces new problems. These include the risk of deepening the banking model through one-way digital content delivery, the administrative complexities of new planning models (e.g., Deep Learning-based planning), and the emergence of new psycho-social issues like cyber-bullying, which requires specific management strategies to prevent [10], [11].

This article argues that the gap between the philosophical ideals of Islamic education and its practical-managerial realities is bridged by the concept of *transformative leadership*. This mode of leadership, particularly one grounded in kindness and ethical conduct [12], [13], functions as the key synthesizing agent. It moves beyond a purely technical-rational view of management [14] to embrace a *pedagogical* vision. This vision repurposes managerial tools like SWOT analysis not just for institutional survival, but as a dialogical (Habermasian) process for identifying and dismantling oppressive

(Freirean) structures within the school. Furthermore, it critically mediates the integration of technology, ensuring it is harnessed not only for administrative efficiency or developing discrete Higher Order Thinking Skills (HOTS) [15], [16] but also for fostering an integrated digital *adab*. This framework seeks to unite the 21st-century skills outlined in transformative curricula [4] with the profound spiritual and ethical grounding offered by Al-Attas's epistemology [1].

This descriptive-narrative study proceeds in four parts. Following this introduction, the methodology section outlines the qualitative, synthesis-based approach. The results section is presented in three narrative arcs: first, an analysis of the philosophical imperative to reconcile *adab* and emancipation; second, an examination of the managerial challenge, reframing strategic planning as a pedagogical practice; and third, an exploration of the digital frontier as a site of both potential alienation and liberation. The discussion synthesizes these findings, arguing for transformative leadership as the *praxis* that connects philosophy to practice. Finally, the conclusion summarizes the argument and posits the emancipatory *adab* model as a contribution to the discourse on holistic education in the 21st century.

2 Method

This study employs a descriptive-narrative qualitative methodology. The primary objective is not empirical data generation from a specific field site, but rather the *synthesis* of existing conceptual frameworks and documented institutional practices to construct a coherent theoretical argument. This approach is aligned with humanities and critical social science traditions , where the analysis and novel juxtaposition of existing texts constitute the primary research contribution [17], [18].

The data for this research consist of a curated body of scholarly literature. This corpus is divided into two main categories: (1) foundational philosophical texts and their contemporary analyses, focusing on the educational theories of Al-Attas, Freire, and Habermas, particularly as interpreted and applied in the Indonesian context [1], [5]–[7], [19]; and (2) applied research and case studies concerning the management, curriculum, and technological integration within Indonesian (Islamic) education [7], [15], [16].

The analytical process involves three narrative phases. First, a conceptual analysis was conducted to deconstruct the core tenets of *adab*-based pedagogy and emancipatory education, identifying points of tension and potential convergence. Second, a thematic analysis of the applied literature was performed to identify and categorize the practical-managerial challenges and strategies reported by school leaders. Third, a narrative synthesis [20] was employed to weave these two streams together. This final phase moved beyond simple description to construct an interpretive argument, repositioning transformative leadership as the central mechanism that mediates between the philosophical and the practical. The research maintains a critical-constructivist position, acknowledging that the reality of educational management is socially constructed while simultaneously advocating for an emancipatory *praxis*.

3   Result

3.1 The Philosophical Imperative: Reconciling *Adab* and Emancipatory Consciousness

The foundational challenge identified in the literature is epistemological. The contemporary crisis in Islamic education, as diagnosed by Al-Attas, is one of de-Islamization and the loss of *adab*. This is not a failure of piety, but a failure of knowledge. When knowledge is fragmented, secularized, and divorced from its divine source, it loses its purpose and ethical grounding. The *adab*-based pedagogy proposed by Al-Attas is a corrective, an epistemological framework where *Tawhid* serves as the integrating principle. In this model, all knowledge—whether scientific, social, or humanistic—is ultimately a pathway to understanding the divine order. This perspective demands a curriculum where spiritual values are not an add-on but the very matrix within which all learning occurs. This is evident in calls to integrate *Tawhidic* values explicitly with ecopedagogy, framing environmental care not just as a civic duty but as a profound spiritual responsibility [16]. This worldview emphasizes harmony, order, and the learner's responsibility within a divinely constituted system.

This internalist focus on spiritual order appears, at first glance, to conflict with the externalist focus of critical pedagogy. Paulo Freire's [6] philosophy is predicated on disruption. It seeks to rupture the culture of silence imposed by oppressive structures through *conscientização*. Education as a practice of liberation is inherently dialogical, problem-posing, and deeply suspicious of hierarchical knowledge transmission, which it labels the banking concept. It aims to empower learners to become subjects who critically rename and remake their world. The goal is not harmony with the existing order, but the just transformation of an unjust order. This philosophy underpins the call for transformative education and the development of 21st-century skills [4], which prioritize critical thinking, communication, and collaboration—skills necessary for democratic and social engagement.

The synthesis of these two powerful philosophies is found to be mediated by a third concept: communicative rationality, as articulated by Habermas [19]. Habermas's ideal speech situation provides a procedural ethic for discourse. It argues that true consensus (and thus, social action) can only be achieved through communication that is intelligible, truthful, sincere, and free from domination [7]. This framework provides a crucial bridge. On one hand, it aligns with the *adab*-based imperative for sincere, truthful, and respectful discourse. It provides a *process* for realizing a community grounded in shared values. On the other hand, its insistence on discourse *free from domination* aligns directly with Freire's emancipatory project. It provides the *method* for a critical and democratic pedagogy.

The result of this philosophical synthesis is the concept of emancipatory *adab*. This framework reframes *adab* not as passive acceptance of hierarchy, but as the ethical-spiritual grounding *required* for authentic, liberating dialogue. It reframes *emancipation* not as a secular rebellion against all tradition, but as the necessary critical *praxis* to ensure that the *Tawhidic* principles of justice and compassion are realized in society. This synthesized philosophy creates a powerful mandate for educational leaders: to cultivate an environment that is simultaneously spiritually profound, ethically rigorous,

and critically engaged. This is the abstract *goal* that leadership must then translate into concrete, managerial practice.

3.2 The Managerial Challenge: Strategic Planning as Pedagogical Practice

The second narrative arc explores how school leaders operationalize the abstract goal of emancipatory *adab*. The literature shows that leaders are increasingly turning to strategic management tools, such as SWOT analysis, to improve education quality in a competitive environment [8]. In its conventional application, SWOT is a market-oriented, technical-rational tool. It is used to identify an institution's internal Strengths and Weaknesses and external Opportunities and Threats to secure a competitive advantage [21]. This application, while functional, risks reducing education to a mere service commodity, thereby reinforcing the very fragmentation and instrumental rationality that Al-Attas criticized.

However, the synthesis reveals a more nuanced picture when this tool is wielded by *transformative leadership* [13], [22]. Transformative leaders, particularly those operating from a kindness-based framework, are found to repurpose and re-ethicize these managerial tools. The SWOT analysis, in this context, is transformed from a corporate instrument into a *pedagogical* and *dialogical* one. It becomes a Freirean problem-posing exercise for the entire school community—teachers, students, and staff.

In this transformed model, the SWOT categories are redefined:

1. Strengths are not limited to high test scores or good facilities, but are identified as the deep grounding in *Tawhidic* epistemology or the strong culture of kindness [13].
2. Weaknesses are not just limited budgets, but are critically identified as residual 'banking' pedagogy (Freire, 1970) in classrooms or a lack of critical engagement with technology [9].
3. Opportunities are not just new government funding, but the potential to use digital innovation for true student engagement or harnessing technology to cultivate Higher Order Thinking Skills (HOTS) for sustainable development [9], [15].
4. Threats are identified not just as competing schools, but as the dehumanizing effects of uncritical tech adoption or the normalization of anti-social behavior like bullying, which necessitates systemic prevention strategies [10].

When used in this way, the strategic planning process becomes a *practice* of communicative action [19]. It is a collective, rational, and sincere dialogue about the school's identity, its challenges, and its emancipatory potential. This approach allows leadership to build a shared vision that is both strategically viable and philosophically coherent. It prevents the managerial mandate (quality improvement, strategic planning) from eclipsing the pedagogical mandate (cultivating emancipatory *adab*). This finding suggests that the *process* of management, when guided by a transformative and kind leadership, is as important as its *outcomes*. It is the primary mechanism through which the institution engages in collective self-reflection and *conscientização*, thus aligning the school's operations with its deepest philosophical commitments.

3.3 The Digital Frontier: Technology as a Site of Alienation or Liberation

The final narrative arc focuses on the most pressing *opportunity* and *threat* identified in the managerial analysis: digital technology. The literature indicates a widespread push for inovasi digital (digital innovation) in Islamic education to enhance learning and engagement. This includes sophisticated approaches such as deep learning-based planning models to optimize educational processes [11]. This technological integration is often framed as essential for developing 21st-century skills and HOTS. However, this narrative of technological optimism is shadowed by a significant threat.

The first threat is that of *instrumentalization and alienation*. When digital tools are adopted uncritically, they risk amplifying the worst aspects of banking education [6]. A deep learning model, if designed purely for efficiency, could become a tool of surveillance and control, optimizing for standardized outcomes rather than for critical, creative, and spiritually-aware individuals. This aligns with Al-Attas's warning against an education that produces automatons who are technically skilled but lack *adab* [1]. Furthermore, the digital space, when unregulated by an ethical framework, becomes a fertile ground for social pathologies like bullying, which requires specific managerial interventions to safeguard student well-being [10]

The second, countervailing narrative is that of *liberation and connection*. The same digital tools, when implemented within the emancipatory *adab* framework, become powerful instruments for liberation. Technology can be harnessed to cultivate HOTS not for abstract problem-solving, but for *critically* addressing real-world issues like environmental sustainability. Digital platforms [9] can be designed to foster *dialogue* (Freire) and *communicative action* (Habermas) rather than passive content consumption. They can connect students in collaborative projects that transcend the classroom walls, enabling them to practice liberation in new and expansive ways [7] .

The synthesis of these findings indicates that the role of transformative leadership is to act as a *critical filter* and *ethical guide* for technological adoption. This leadership task involves several key actions. First, it involves critically assessing any new technology (including AI and deep learning models) based on its pedagogical, rather than purely administrative, merits. The question is not Does it make planning more efficient? but Does it deepen *adab* and foster emancipation? [11]. Second, it requires the active cultivation of a digital *adab*. This is a novel concept emerging from the synthesis, signifying a set of institutional norms, curriculum modules, and shared ethics that govern online interaction. This digital *adab* would be the practical antidote to cyber-bullying [10] and digital alienation, grounding 21st-century digital citizenship in the *Tawhidic* epistemology. In essence, transformative leadership ensures that technology remains a *servant* to the pedagogical vision, not its master.

4   Discussion

The findings of this narrative synthesis compellingly suggest that the myriad challenges facing Indonesian Islamic education—philosophical tensions, managerial pressures, and technological disruptions—are not discrete problems to be solved in isolation. Rather, they are facets of a single, central challenge: the need for a holistic *praxis* that unites epistemology with action. The results demonstrate that transformative

leadership, particularly when characterized by kindness and ethical vision [13], functions as this vital *praxis*. This discussion argues that the three narrative results—the philosophical synthesis of emancipatory *adab*, the re-purposing of strategic management, and the critical mediation of technology—are not merely parallel findings but a deeply integrated model for institutional transformation.

The philosophical reconciliation of Al-Attas's *adab*-based epistemology with Freire's and Habermas's emancipatory-communicative ethics is the indispensable foundation [1]. Without this conceptual coherence, school management becomes a purely reactive, technical exercise. Leaders are left to oscillate between conflicting demands: tradition versus modernity, or spirituality versus critical skills. The emancipatory *adab* framework resolves this dichotomy, positing that a truly liberated individual (in the Freirean sense) must possess the ethical self-knowledge of *adab*, and a person of true *adab* (in the Al-Attasian sense) must exercise their knowledge to enact justice and compassion in the world. This synthesis provides the institutional why, a clear, unified purpose.

However, a philosophy alone is insufficient. The second finding—the repurposing of managerial tools like SWOT analysis [8]—provides the institutional how. This is perhaps the most significant practical contribution of the synthesis. It refutes the notion that management is a value-neutral, technical domain. Instead, it demonstrates that managerial processes are, in fact, sites of intense pedagogical and ideological work. When a transformative leader [13] facilitates a SWOT analysis as a dialogical, problem-posing exercise, they are actively engaging in the practice of liberation at an institutional scale. They are creating a space for *communicative action* [19] where the community can collectively identify its internal contradictions (e.g., a Weakness like residual 'banking' pedagogy) and align its Strengths (e.g., *Tawhidic* values) with its Opportunities (e.g., using HOTS for environmentalism) [15], [16]. This kindness-based, dialogical management model is the *affective* and *procedural* dimension of emancipatory *adab*.

Finally, the digital frontier serves as the primary test case for this integrated model. Technology is not a neutral tool; it is an environment that actively shapes consciousness. The findings show that without the emancipatory *adab* framework and the critical-dialogical management process, technology is likely to be adopted in ways that deepen the very crisis Al-Attas identified. Deep learning models could become the ultimate banking tool, and digital platforms could become vectors for alienation and bullying [10]. The proposed concept of digital *adab* is the operationalization of the philosophical framework *within* this new environment. It represents the transformative leader's insistence that 21st-century skills [4] must be defined not just by what students can *do* (critical thinking, digital literacy) but by *who they become* (compassionate, just, and spiritually-grounded subjects). This study's limitations include its theoretical nature, as it relies on a synthesis of existing literature rather than direct empirical investigation. Future research should seek to validate this model through in-depth, longitudinal case studies of transformative leaders in Indonesian Islamic schools.

5   Conclusion

This article has navigated the complex terrain of modern Islamic education in Indonesia, charting a course between the philosophical demands of spiritual tradition and the practical imperatives of 21st-century management and digitalization. The central argument is that these forces are not irreconcilable. A coherent and effective model emerges through the synthesis of *adab*-based epistemology (Al-Attas) and emancipatory-communicative pedagogy (Freire, Habermas). This synthesized philosophy, termed emancipatory *adab*, provides the essential why for educational transformation.

The findings of this narrative synthesis demonstrate that this philosophy is translated into practice—into *praxis*—through the mechanism of transformative, kindness-based leadership. This leadership repurposes technical managerial tools like SWOT analysis, transforming them into dialogical and pedagogical processes of institutional self-awareness and liberation. This integrated model finds its most critical application in the realm of digital technology, where transformative leaders must critically mediate innovation to foster a digital *adab*. This ensures that technology is harnessed to cultivate 21st-century competencies that are not only technically proficient but also ethically grounded, critically conscious, and spiritually whole. This framework offers a pathway for Islamic education to move beyond a state of crisis, offering a holistic model of human development that is both authentically Islamic and profoundly relevant to the challenges of the contemporary world.

References

[1]   S. Anwar and H. Umam, 'Globalization and The Crisis in Islamic Education: Al-Attas' Epistemological Response and The Reconstruction of Adab-Based Pedagogy', *J. YAQZHAN Anal. Filsafat, Agama dan Kemanus.*, vol. 11, no. 1, pp. 135–149, 2025, doi: 10.24235/jy.v11i1.21161.

[2]   T. L. Friedman, *The world is flat: A brief history of the twenty-first century*. Farrar, Straus and Giroux, 2005.

[3]   A. Azra, *The origins of Islamic reformism in Southeast Asia: Networks of Malay-Indonesian and Middle Eastern 'Ulama' in the seventeenth and eighteenth centuries*. Allen \& Unwin, 2004.

[4]   S. Anwar and H. Umam, 'Transformative education: Emphasising 21st century skills and competencies in the independent learning curriculum', *AIM J. Islam. Educ. Manag.*, vol. 1, no. 1, pp. 1–16, 2020, doi: 10.15575/aim.v1i1.28886.

[5]   S. M. N. Al-Attas, *The concept of education in Islam: A framework for an Islamic philosophy of education*. Muslim Youth Movement of Malaysia, 1980.

[6]   P. Freire, *Pedagogy of the Oppressed*. New York: Herder and Herder, 1970.

[7]   S. Anwar, 'Education as a Practice of Liberation: A Synthesis of Freire's and Habermas' Philosophical Contributions to Emancipatory Consciousness', *AIM J. Islam. Educ. Manag.*, vol. 2, no. 3, pp. 228–247, 2024.

[8]   S. Anwar and I. Sulaeman, 'SWOT Analysis as a Strategic Approach in Improving Education Quality', *Shibyan J. Pendidik. Guru Madrasah Ibtidaiyah*, vol. 3, no. 1, pp. 1–13, 2025, doi: https://doi.org/10.30999/shibyan.v3i1.3786.

[9]   U. Ulfah and S. Anwar, 'Inovasi Digital dalam Pendidikan Islam: Meningkatkan Kualitas Pembelajaran dan Keterlibatan Mahasiswa', *ULUL ALBAB J. Pendidik. Agama Islam*, vol. 2, no. 1, pp. 58–76, 2024, doi: https://doi.org/10.30999/ululalbab.v2i1.3521.

[10]   N. M. Maryati, H. Hidayat, N. Sulastri, and S. Anwar, 'School Management in Preventing Bullying in Primary Schools', *J. Innov. Res. Prim. Educ.*, vol. 4, no. 4, pp. 1891–1903, 2025, doi: https://doi.org/10.56916/jirpe.v4i4.1770.

[11]   N. Sulastri, S. Anwar, U. Suherman, and E. S. Cipta, 'Deep Learning-Based Planning Model for Islamic Education in Indonesian Integrated Schools', *EDUKASIA J. Pendidik. dan Pembelajaran*, vol. 5, no. 2, pp. 645–658, 2024, doi: https://doi.org/10.62775/edukasia.v5i2.1734.

[12]   T. Bush, *Theories of Educational Leadership and Management*, 4th ed. London: SAGE Publications, 2011.

[13]   U. Suherman *et al.*, 'Implementing a Kindness-Based Leadership Strategy in Islamic Elementary Education', *EDUKASIA J. Pendidik. dan Pembelajaran*, vol. 6, no. 1, pp. 281–292, 2025, doi: https://doi.org/10.62775/edukasia.v6i1.1384.

[14]   M. Fullan, *Leading in a culture of change*. Jossey-Bass, 2001.

[15]   A. Hanan *et al.*, 'Harnessing Technology for Environmental Method: Cultivating High Order Thinking Skills for Sustainable Maritime Development Knowledge', in *IOP Conference Series: Earth and Environmental Science*, 2023, vol. 1265, no. 1, p. 12004. doi: 10.1088/1755-1315/1265/1/012004.

[16]   S. Anwar, F. Maulani, W. Lutfiah, S. I. H. Syadiah, and A. S. N. Azizah, 'Integrasi Nilai Ketauhidan dan Ekopedagogi dalam Kurikulum Madrasah Ibtidaiyah untuk Penguatan Karakter Peduli Lingkungan', *TSAQAFATUNA J. Ilmu Pendidik. Islam*, vol. 7, no. 1, 2025.

[17]   J. W. Creswell and C. N. Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed. Thousand Oaks, CA: Sage Publications, 2018.

[18]   M. Q. Patton, *Qualitative research \& evaluation methods*, 4th ed. SAGE Publications, 2015.

[19]   J. Habermas, *The Theory of Communicative Action: Reason and the Rationalization of Society*. Boston: Beacon Press, 1984.

[20]   D. M. Rousseau, J. Manning, and D. Denyer, 'Evidence in management and organizational science: Assembling the field's full range of knowledge', *Acad. Manag. Ann.*, vol. 2, no. 1, pp. 475–515, 2008.

[21]   F. R. David and F. R. David, *Strategic management: A competitive advantage approach, concepts and cases*, 16th ed. Pearson, 2017.

[22]   J. M. Burns, *Leadership*. Harper \& Row, 1978.