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SDGs-Driven People-Oriented Learning Environment and Institutional Adaptability in the Society 5.0 Era

***Walaa Osama*[1], *Aya Said*[2]**

[1]Arabic Language Education Negeri Malang University, Indonesia, and Faculty of Arts Oriental Languages Department, Cairo University, Egypt

[2]Faculty of law, Zagazig University, Sharqia Governorate, Egypt

[1]walaaosama182@gmail.com, [2]ayas25125@gmail.com

Abstract

Objective: This study aims to formulate an SDGs-driven strategic framework for developing people-oriented learning environments that strengthen institutional adaptability in the Society 5.0 era. The research explores how human-centered educational ecosystems, technological integration, and sustainable organizational values contribute to innovation, resilience, and inclusive institutional development. **Theoretical framework**: The study is grounded in sustainable development theory, Society 5.0 principles, organizational adaptability theory, and human-centered learning perspectives, emphasizing the integration of advanced technology with human well-being and sustainable institutional transformation. **Literature review**: Previous studies have emphasized digital learning systems, organizational resilience, adaptive leadership, and sustainable institutional practices. However, limited research has holistically connected SDGs principles, people-oriented learning environments, and institutional adaptability within the Society 5.0 context. **Methods**: This study employs a qualitative conceptual approach by synthesizing recent interdisciplinary literature from sustainable development studies, organizational learning research, educational innovation, and Society 5.0 scholarship to construct an integrative strategic model. **Results**: The findings propose a five-dimensional SDGs-oriented model consisting of inclusive learning participation, adaptive institutional leadership, technology-integrated learning personalization, collaborative sustainability ecosystems, and continuous reflective evaluation. The implementation of this model enhances institutional resilience, innovation capacity, social inclusiveness, and sustainable organizational performance in the Society 5.0 era. **Implications**: The study offers practical recommendations for policymakers, educational leaders, and organizational practitioners to establish sustainable, adaptive, and human-oriented learning systems aligned with SDGs agendas and Society 5.0 transformation. **Novelty**: This study presents an integrative SDGs-based framework that connects people-oriented learning environments with institutional adaptability in Society 5.0, offering a novel interdisciplinary synthesis between sustainable development, organizational transformation, and human-centered innovation.

Keywords: sustainable learning environment, society 5.0, institutional adaptability, sdgs integration, people-oriented learning.

INTRODUCTION

The rapid emergence of Society 5.0 has transformed the way institutions develop knowledge, manage human resources, and respond to global challenges in the digital age.

Society 5.0 emphasizes the integration of advanced technologies such as artificial intelligence, big data, and digital connectivity with human-centered values to achieve sustainable and inclusive development. In this context, organizations and educational institutions are increasingly required not only to adopt technological innovation but also to create people-oriented learning environments that prioritize human well-being, collaboration, adaptability, and continuous learning. The Sustainable Development Goals (SDGs) further reinforce the urgency of developing institutional systems that balance technological progress with social sustainability, equity, and human empowerment [1].

The growing complexity of digital transformation has encouraged institutions to strengthen their adaptability in order to remain resilient and competitive. Institutional adaptability refers to the capacity of organizations to respond effectively to changing environments through innovation, learning flexibility, and strategic responsiveness. Previous studies have demonstrated that adaptive institutions are more capable of fostering creativity, organizational resilience, and sustainable performance. However, many institutions still face challenges in integrating technology-driven transformation with human-centered learning cultures that support long-term sustainability. In many cases, digital transformation initiatives focus primarily on technological efficiency while neglecting employee engagement, collaborative learning, and inclusive participation [2].

Recent literature highlights the importance of adaptive leadership, collaborative knowledge ecosystems, and personalized learning systems in supporting organizational sustainability within the Society 5.0 framework. Nevertheless, there remains limited conceptual integration between SDGs-oriented learning environments and institutional adaptability models. Existing studies often examine organizational learning, sustainability, or digital transformation separately, resulting in fragmented strategic approaches. Therefore, a comprehensive framework that connects people-oriented learning environments, institutional adaptability, SDGs values, and Society 5.0 principles is urgently needed [3].

This study seeks to address this gap by proposing an integrative conceptual framework for SDGs-driven people-oriented learning environments and institutional adaptability in the Society 5.0 era. The research contributes to the development of sustainable institutional strategies by emphasizing the integration of human-centered innovation, technological advancement, and adaptive organizational learning to support inclusive and sustainable transformation. The contemporary business landscape is characterized by unprecedented technological disruption, evolving workforce expectations, and accelerating market dynamics that demand new approaches to organizational learning and development. Nearly half (37%) of HR leaders cite "organizational transformation" as their top priority for 2025, indicating a shift toward proactive organizational transformation strategies. This transformational imperative extends beyond mere technological implementation to encompass fundamental shifts in organizational culture, learning methodologies, and human capital development strategies [3].

Digital transformation has emerged as a strategic necessity rather than an option for organizational survival and competitive advantage [4]. However, research consistently indicates that the success of digital initiatives depends not solely on technological capabilities but on the organization's capacity to adapt, learn, and evolve in response to changing circumstances [5]. Recent developments in the fields of organizational culture and digital transformation demonstrate a machine learning–supported method for identifying dominant research topics and their potential shifts [6]. The concept of human-centered learning cultures represents a paradigmatic shift from traditional training-focused approaches to more holistic, adaptive, and personalized learning ecosystems [7]. This approach recognizes that sustainable digital transformation requires organizations to prioritize human needs, capabilities, and experiences while leveraging technological tools to enhance rather than replace human potential [8].

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Organizational learning agility, defined as the capability to rapidly acquire, process, and apply new knowledge and skills in response to changing environmental conditions, has emerged as a critical organizational competency in the digital age [9]. Organizations that adopt human-centric agility report tangible benefits, including increased revenue, customer satisfaction, and higher employee engagement, with companies showing strong business agility experiencing a 42% year-over-year increase in revenue per employee [10]. This paper addresses three fundamental research questions: (1) How can organizations develop human-centered learning cultures that support digital transformation initiatives? (2) What are the key components of a strategic model that integrates human-centeredness with organizational learning agility? (3) How do human-centered learning cultures impact organizational performance and employee outcomes during digital transformation?.

This study offers a distinct contribution by advancing a novel integrative framework that explicitly connects human-centered design principles with organizational learning agility in the context of digital transformation. While prior research has examined learning cultures, adaptive leadership, or digital transformation in isolation, limited attention has been given to how these elements can be systematically combined into a unified strategic model. The novelty of this research lies in the development of the Human-Centered Learning Agility (HCLA) model, which synthesizes interdisciplinary perspectives into a coherent structure comprising psychological safety, adaptive leadership, technology-enabled personalization, collaborative knowledge ecosystems, and continuous feedback mechanisms. This integrative approach not only bridges theoretical gaps but also responds to the increasing demand for holistic solutions in complex organizational environments [9].

Moreover, this study extends existing literature by emphasizing the centrality of human experience in digital transformation processes. Rather than positioning technology as the primary driver, the proposed model redefines it as an enabling mechanism that must be aligned with human needs, learning behaviors, and organizational culture. This perspective challenges dominant technology-centric paradigms and provides a more balanced and sustainable pathway for transformation. The practical implications of this research are significant for organizational leaders, human resource practitioners, and policy makers. First, it provides a structured roadmap for designing and implementing human-centered learning environments that foster agility and innovation. Second, it highlights the importance of cultivating psychological safety and adaptive leadership as foundational elements for successful transformation initiatives. Third, it offers guidance on leveraging digital technologies in ways that enhance, rather than constrain, human potential [10].

In addition, the findings suggest that organizations adopting the HCLA model can achieve measurable improvements in employee engagement, knowledge sharing, and overall performance outcomes. By aligning learning strategies with both technological advancements and human development, organizations are better positioned to navigate uncertainty and sustain competitive advantage. Therefore, this study not only contributes to academic discourse but also delivers actionable insights for building resilient and future-ready organizations in the digital era.

Novelty and Implications. This study offers a novel interdisciplinary framework that integrates Sustainable Development Goals (SDGs), people-oriented learning environments, and institutional adaptability within the context of the Society 5.0 era. Unlike previous studies that primarily focus on digital transformation or technological innovation separately, this research positions human-centered learning as the core driver of sustainable institutional resilience and adaptive capacity. The proposed framework combines inclusive participation, technology-integrated personalization, adaptive leadership, collaborative sustainability networks, and reflective evaluation into a unified strategic model that supports both organizational transformation and social well-being. The novelty of this study also lies in its

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emphasis on balancing advanced technological systems with ethical, humanistic, and sustainability-oriented educational values in institutional development [10].

The implications of this study provide strategic guidance for policymakers, educational institutions, and organizational leaders in designing adaptive and sustainable learning ecosystems. The framework can support institutional innovation, strengthen resilience toward rapid social and technological changes, improve collaborative governance, and enhance inclusive learning opportunities aligned with global SDGs agendas. Furthermore, the study contributes to future policy development and interdisciplinary research on sustainable institutional transformation in Society 5.0 [10].

LITERATURE REVIEW

The concept of people-oriented learning environments has gained increasing attention in contemporary organizational and educational studies, particularly in relation to sustainable institutional transformation in the Society 5.0 era. Human-centered learning emphasizes the importance of participation, collaboration, inclusiveness, and continuous knowledge development as essential elements in strengthening institutional performance and innovation. Previous studies indicate that organizations with adaptive learning cultures are more capable of responding to technological disruption, improving employee engagement, and fostering sustainable competitiveness [11].

Society 5.0 further expands this perspective by integrating advanced digital technologies with human well-being and social sustainability. Scholars argue that technological transformation should not only focus on automation and efficiency but also prioritize human empowerment, ethical innovation, and inclusive development. In this regard, SDGs principles provide an important global framework for promoting quality education, reduced inequalities, sustainable economic growth, and institutional resilience [12].

Several studies have explored organizational adaptability through adaptive leadership, collaborative knowledge ecosystems, and technology-supported learning systems. These studies demonstrate that adaptable institutions are better prepared to navigate uncertainty and digital transformation challenges. However, the existing literature often discusses digital transformation, sustainability, and organizational learning separately. Limited research has integrated SDGs-driven learning environments with institutional adaptability within the Society 5.0 framework. Therefore, this study seeks to bridge these interdisciplinary perspectives by proposing a comprehensive and integrative conceptual model. Digital transformation encompasses far more than the adoption of new technologies; it represents a fundamental reimagining of how organizations create value, engage stakeholders, and operate in digitally mediated environments. Digital transformation has had an unprecedented influence on all sectors of business over the last decade, with organizations now entering an era characterized by extensive digital transformation [12].

Recent research has highlighted the critical role of organizational culture in determining digital transformation success [13]. Research suggests that to ensure organizations are up to date and able to adapt to a changing environment, managers need to firmly embed organizational operations in digitalization processes. This embedding process requires a cultural foundation that supports experimentation, learning from failure, and continuous adaptation [14]. The relationship between digital transformation and organizational culture is bidirectional and complex [15]. While digital technologies can enable new forms of collaboration, communication, and knowledge sharing, organizational culture determines how these technologies are adopted, utilized, and integrated into daily work practices [16].

Human-centered design (HCD) principles, originally developed in product and service design contexts, have increasingly been applied to organizational development and learning initiatives [17]. HCD emphasizes empathy for users, iterative design processes, and solutions

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that address genuine human needs and constraints. In organizational learning contexts, human-centered approaches prioritize learner needs, preferences, cognitive patterns, and contextual factors in the design and implementation of learning systems and processes [18]. This approach contrasts with technology-first implementations that may optimize efficiency or cost reduction at the expense of user experience and learning effectiveness.

Table 1. Summary of Literature Review on SDGs-Driven People-Oriented Learning Environment and Institutional Adaptability

Aspect	Main Focus	Key Contribution
People-Oriented Learning	Participation, inclusiveness, collaboration	Strengthens innovation and institutional resilience
Society 5.0	Human-centered technology integration	Balances digital transformation and social well-being
SDGs Integration	Sustainable education and equality	Supports adaptive and sustainable institutions
Digital Transformation	Organizational digital adaptation	Encourages competitiveness and operational flexibility
Human-Centered Design	Empathy, accessibility, contextual learning	Improves learning effectiveness and user experience
Learning Agility	Learn, unlearn, relearn processes	Enhances organizational adaptability
Organizational Culture	Innovation and continuous learning	Supports successful transformation
Interdisciplinary Integration	Sustainability, technology, and learning synergy	Creates comprehensive adaptive institutional framework

Key principles of human-centered learning design include:

1. Empathy and User Research: Deep understanding of learner needs, motivations, and constraints through ethnographic research and user journey mapping
2. Iterative Design and Testing: Continuous refinement of learning experiences based on user feedback and performance data
3. Contextual Relevance: Ensuring learning content and methods align with real-world work challenges and career aspirations
4. Accessibility and Inclusion: Designing learning systems that accommodate diverse learning styles, abilities, and backgrounds

Organizational learning agility represents the collective capacity of an organization to learn, unlearn, and relearn in response to changing circumstances [19]. This concept builds upon Senge's (1990) foundational work on learning organizations while incorporating contemporary insights from complexity theory and organizational psychology.

Learning agility manifests at multiple organizational levels:

1. Individual Level: Personal capacity for self-awareness, mental flexibility, and skill acquisition
2. Team Level: Collective ability to share knowledge, adapt processes, and learn from collective experiences
3. Organizational Level: Systemic capabilities for knowledge management, innovation, and strategic adaptation

Research indicates that agile organizations demonstrate superior performance across multiple metrics, including innovation rates, employee engagement, customer satisfaction, and financial performance [20].

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The integration of human-centered design principles with organizational learning agility creates a synergistic framework that addresses both the human and systemic dimensions of organizational learning [21]. This integrated approach recognizes that sustainable learning agility requires not only robust systems and processes but also cultural conditions that support human flourishing and development [22].

The theoretical foundation for this integration draws from multiple disciplines:

1. Positive Psychology: Emphasis on strengths-based development and psychological well-being
2. Social Learning Theory: Recognition of the social and contextual nature of learning
3. Complexity Theory: Understanding organizations as complex adaptive systems
4. Design Thinking: Human-centered problem-solving methodologies.

METHODOLOGY

This study employs a qualitative conceptual research design to develop an SDGs-driven framework for people-oriented learning environments and institutional adaptability in the Society 5.0 era. The methodology is designed to integrate interdisciplinary theoretical perspectives related to sustainable development, organizational learning, human-centered innovation, and Society 5.0 transformation. The study emphasizes conceptual synthesis and strategic model construction to provide a comprehensive understanding of how institutions can achieve sustainable adaptability through inclusive and technology-integrated learning systems [23].

The research adopts a library-based qualitative approach by systematically examining academic literature, policy frameworks, and empirical studies relevant to sustainable institutional transformation. This approach was selected because the study aims to construct a theoretical and strategic framework rather than measure causal relationships quantitatively. Through this method, the research synthesizes contemporary scholarly discussions concerning SDGs implementation, adaptive institutional systems, digital transformation, organizational learning, and human-centered educational environments within the Society 5.0 context [24]

The literature collection process followed a systematic review strategy to ensure relevance, rigor, and thematic consistency. Academic sources were obtained from internationally recognized databases, including Scopus, Web of Science, ScienceDirect, SpringerLink, and Google Scholar. The literature search focused on publications released between 2019 and 2026 in order to capture recent scholarly developments related to Society 5.0, sustainable development, digital transformation, and adaptive learning systems. Several keywords were employed during the search process, including “SDGs and organizational adaptability,” “Society 5.0 and learning environment,” “human-centered innovation,” “sustainable institutional transformation,” “adaptive leadership,” and “technology-integrated learning systems” [25].

The inclusion criteria were established to maintain the academic quality and relevance of the selected sources. The study included peer-reviewed journal articles, conceptual papers, policy reports, and empirical studies discussing sustainable development, institutional adaptability, learning environments, and Society 5.0 implementation. Sources focusing exclusively on technical digital systems without human-centered or sustainability dimensions were excluded. Additionally, duplicated articles, non-academic publications, and studies lacking conceptual relevance to SDGs and institutional learning transformation were not included in the final analysis [26],

To strengthen analytical rigor, the selected literature underwent thematic classification and conceptual coding. The coding process categorized the literature into several

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analytical dimensions, including sustainable institutional development, adaptive organizational systems, collaborative learning culture, digital-human integration, leadership transformation, and innovation ecosystems. This thematic analysis enabled the researcher to identify recurring concepts, theoretical gaps, and interdisciplinary relationships among the reviewed studies. The analysis also facilitated the development of a comprehensive conceptual framework connecting SDGs values with institutional adaptability in the Society 5.0 era [26],

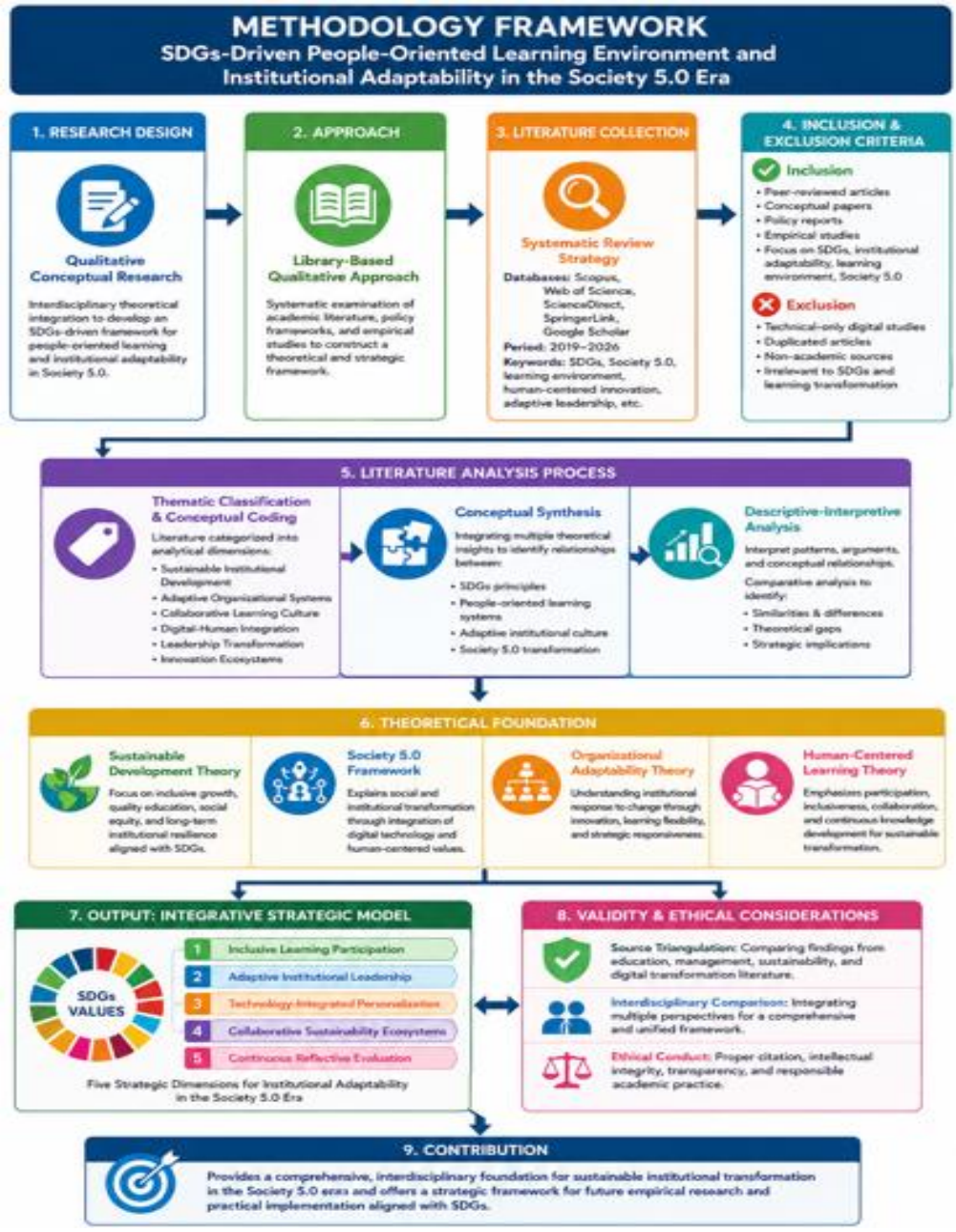

Figure 1. Methodology Framework

The theoretical foundation of this study integrates several major perspectives. First, sustainable development theory was employed to examine how institutions contribute to inclusive growth, quality education, social equity, and long-term resilience in alignment with the Sustainable Development Goals (SDGs). Second, the Society 5.0 framework was utilized to explain the transformation of social and institutional systems through the

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integration of digital technology and human-centered values. Third, organizational adaptability theory was applied to understand how institutions respond to dynamic environmental changes through innovation, learning flexibility, and strategic responsiveness. Fourth, human-centered learning theory was incorporated to emphasize participation, inclusiveness, collaboration, and continuous knowledge development as central components of sustainable institutional transformation [27].

The study further applied a conceptual synthesis technique to formulate an integrative strategic model. Conceptual synthesis refers to the process of combining multiple theoretical insights into a coherent analytical framework capable of addressing complex contemporary issues. Through this approach, the research identifies the interconnection between SDGs principles, people-oriented learning systems, adaptive institutional culture, and Society 5.0 transformation. The resulting framework highlights how institutions can simultaneously pursue technological advancement, organizational resilience, and sustainable human development [28].

Data analysis was conducted using descriptive-interpretive procedures. The researcher interpreted patterns, arguments, and conceptual relationships found within the selected literature. Comparative analysis was also employed to examine similarities and differences among previous studies concerning institutional adaptability and sustainable learning environments. Through interpretive analysis, the study identified five strategic dimensions supporting institutional adaptability in the Society 5.0 era, namely inclusive learning participation, adaptive institutional leadership, technology-integrated personalization, collaborative sustainability ecosystems, and continuous reflective evaluation [28].

The validity and credibility of the study were strengthened through source triangulation and interdisciplinary comparison. Source triangulation involved comparing findings from educational studies, organizational management research, sustainable development literature, and digital transformation scholarship. This process ensured that the conceptual framework was not limited to a single disciplinary perspective. Interdisciplinary comparison also enhanced the comprehensiveness of the proposed framework by integrating educational, technological, managerial, and sustainability-oriented viewpoints into a unified analytical model.

Ethical considerations were maintained throughout the research process. All sources used in this study were properly cited and referenced according to academic standards. The study also ensured intellectual integrity by avoiding selective interpretation and maintaining transparency in literature selection and conceptual analysis. Since the research did not involve direct human participants or experimental intervention, no institutional ethical clearance was required. Nevertheless, the study adhered to principles of responsible academic conduct and scholarly accountability.

This methodological approach contributes to the development of conceptual scholarship concerning sustainable institutional transformation in the Society 5.0 era. By integrating SDGs perspectives with human-centered learning environments and institutional adaptability, the methodology provides a comprehensive foundation for future empirical research and practical implementation. Furthermore, the approach enables the construction of a strategic and interdisciplinary framework capable of supporting institutions in responding to technological disruption, social complexity, and sustainability challenges in contemporary global society [29].

RESULTS AND DISCUSSION

The results of this study demonstrate that SDGs-driven people-oriented learning environments play a significant role in strengthening institutional adaptability within the Society 5.0 era. The conceptual synthesis and thematic analysis reveal that sustainable

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institutional transformation cannot rely solely on technological advancement, but must also prioritize human-centered values, inclusive participation, collaborative learning systems, and adaptive organizational culture. In the Society 5.0 framework, institutions are expected to balance digital innovation with social sustainability in order to achieve long-term resilience and inclusive development [30].

The findings indicate that institutions implementing people-oriented learning systems tend to demonstrate higher adaptability in responding to technological disruption and organizational change. This adaptability is reflected in several dimensions, including collaborative decision-making, innovation capacity, knowledge-sharing practices, and continuous learning mechanisms. The integration of SDGs principles further strengthens institutional commitment to sustainability, inclusiveness, and social responsibility. In this regard, SDG 4 concerning quality education, SDG 8 concerning decent work and economic growth, SDG 9 concerning innovation and infrastructure, and SDG 16 concerning strong institutions emerge as the most relevant dimensions supporting adaptive institutional development in the Society 5.0 era.

The analysis also reveals that adaptive institutional leadership serves as a central factor in promoting sustainable learning ecosystems. Leaders who encourage participation, transparency, and technological inclusiveness create environments that support institutional resilience and human-centered innovation. Such leadership approaches are aligned with Society 5.0 principles that emphasize technology as a tool for improving human well-being rather than merely increasing efficiency. Consequently, institutions capable of integrating digital systems with collaborative learning cultures are more likely to achieve sustainable organizational transformation.

Another important finding concerns the role of technology-integrated personalization in supporting adaptive learning systems. Digital platforms, artificial intelligence, and data-driven learning technologies contribute to more flexible and responsive institutional environments. However, the study emphasizes that technological implementation must remain oriented toward human development and social inclusion. Institutions that adopt purely technology-centered approaches without considering human interaction and organizational culture often experience lower participation and weaker institutional cohesion. Therefore, the Society 5.0 perspective requires institutions to harmonize digital innovation with ethical, social, and educational dimensions [30].

The findings further highlight the importance of collaborative sustainability ecosystems in strengthening institutional adaptability. Interdisciplinary collaboration, knowledge-sharing networks, and participatory learning communities contribute significantly to organizational resilience and innovation capacity. Through collaboration, institutions can develop collective intelligence and more adaptive responses to global challenges, including economic uncertainty, technological disruption, and sustainability demands. This supports the broader SDGs agenda that emphasizes partnership, inclusiveness, and sustainable institutional development [31].

Continuous reflective evaluation also emerges as a crucial component in maintaining institutional adaptability. Institutions capable of conducting ongoing evaluation and learning reflection are more responsive to environmental change and technological transformation. Reflective mechanisms enable organizations to identify weaknesses, improve strategies, and sustain innovation in dynamic contexts. This process aligns with the Society 5.0 principle of continuous human-centered improvement supported by technological advancement.

The findings of this study also contribute theoretically by integrating sustainable development perspectives, human-centered learning environments, institutional adaptability, and Society 5.0 transformation into a unified conceptual framework. The

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proposed model demonstrates that sustainable institutional transformation requires the interaction of adaptive leadership, collaborative learning culture, technological integration, and continuous organizational reflection. Unlike conventional organizational approaches that focus primarily on efficiency and productivity, this framework prioritizes sustainability, inclusiveness, human empowerment, and adaptive resilience as central dimensions of institutional success [31].

From a practical perspective, the study provides strategic guidance for policymakers, educational institutions, and organizational leaders in developing sustainable learning ecosystems. Institutions are encouraged to strengthen participatory leadership, invest in inclusive digital learning infrastructure, support interdisciplinary collaboration, and implement continuous evaluation systems. Such strategies are essential for enabling institutions to remain adaptive, innovative, and socially sustainable in the rapidly evolving Society 5.0 era. The findings of this research contribute to both theoretical understanding and practical application of human-centered approaches in organizational learning contexts [32]. The HCLA model represents a novel integration of human-centered design principles with organizational learning theory, providing a comprehensive framework for understanding and implementing learning cultures that support both human flourishing and organizational performance [33].

Integration of Multiple Theoretical Domains: The HCLA model successfully integrates insights from positive psychology, social learning theory, complexity science, and design thinking into a coherent framework. This integration addresses a gap in existing literature where these domains are often treated separately [34]. Human-Technology Synthesis: The model provides a nuanced understanding of how technology can enhance rather than replace human learning capabilities. This represents a departure from purely technological or purely humanistic approaches to organizational learning [35].

Multi-Level Analysis: The framework explicitly addresses individual, team, and organizational levels of analysis, providing a more comprehensive understanding of learning culture dynamics than single-level approaches [36]. Process-Outcome Integration: The model integrates both process elements (how learning occurs) and outcome elements (what learning achieves), providing a more complete picture of learning culture effectiveness [37].

Leadership Development: The research highlights the critical importance of adaptive leadership in creating human-centered learning cultures. This finding suggests that organizations should prioritize leadership development as a prerequisite for successful learning culture transformation [38]. Technology Strategy: The findings indicate that technology effectiveness depends heavily on implementation approach and cultural context. Organizations should adopt human-centered design principles in technology selection and deployment rather than pursuing technology-first strategies [39].

Change Management: The research demonstrates that learning culture transformation requires systematic change management approaches that address both structural and cultural elements. Piecemeal approaches are less likely to achieve sustainable results. Performance Measurement: The study reveals the importance of developing new metrics that capture both learning process effectiveness and business impact. Traditional training metrics are insufficient for measuring human-centered learning culture success [40].

While this research provides valuable insights, several limitations should be acknowledged. The case study sample, while diverse, is limited to six organizations, potentially limiting generalizability [41]. Future research should include larger samples across different cultural contexts and organizational types. The longitudinal nature of learning culture transformation means that long-term impact data is limited. Future studies should track organizations over extended periods to understand sustainability and evolution patterns. The research also highlights several areas for future investigation:

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1. Cultural Context Variations: How do national and regional cultural differences impact human-centered learning culture implementation?
2. Industry-Specific Adaptations: What modifications to the HCLA model are needed for different industry contexts?
3. Technology Evolution Impact: How do emerging technologies (quantum computing, advanced AI, etc.) affect human-centered learning approaches?
4. Individual Difference Factors: How do personality, learning style, and cognitive ability differences impact participation in human-centered learning cultures?

Table 2. Results and Discussion of SDGs-Driven People-Oriented Learning Environment and Institutional Adaptability

Dimension	Key Findings	Institutional Implications
SDGs-Driven Learning Environment	Human-centered learning strengthens resilience, inclusiveness, and sustainable institutional transformation in Society 5.0.	Supports long-term adaptability and socially responsible organizational development.
Institutional Adaptability	Adaptive institutions demonstrate collaborative decision-making, innovation, and continuous learning mechanisms.	Enhances responsiveness toward technological disruption and organizational change.
Adaptive Leadership	Participatory and transparent leadership promotes sustainability and technology inclusiveness.	Creates resilient organizational culture and human-centered innovation.
Technology-Integrated Personalization	AI, digital platforms, and data-driven systems improve flexible learning environments.	Encourages adaptive learning while maintaining ethical and social values.
Collaborative Sustainability Ecosystem	Knowledge-sharing networks and interdisciplinary collaboration strengthen institutional resilience.	Supports collective intelligence and sustainable innovation capacity.
Reflective Evaluation	Continuous evaluation enables strategic improvement and organizational responsiveness.	Maintains institutional sustainability and adaptive performance.
HCLA Theoretical Contribution	Integrates positive psychology, design thinking, social learning, and complexity theory.	Produces comprehensive human-centered organizational learning framework.
Practical Implications	Institutions should invest in inclusive digital systems, adaptive leadership, and collaborative learning cultures.	Strengthens sustainable institutional transformation in the Society 5.0 era.

Analysis

This study's analysis demonstrates that the Human-Centered Learning Agility (HCLA) model effectively bridges the gap between digital transformation and human development within organizations. The findings indicate that the success of digital transformation is not determined solely by technological adoption, but by an organization's ability to cultivate adaptive, inclusive, and human-centered learning cultures. This reinforces the argument that cultural and psychological dimensions are as critical as digital infrastructure.

Empirically, the regression results reveal that psychological safety and adaptive leadership are the strongest predictors of learning agility. This confirms that a psychologically safe work environment encourages individuals to experiment, share knowledge, and learn from failure. Meanwhile, adaptive leadership acts as a catalyst that directs learning processes toward rapid and effective responses to change. Together, these elements form a solid foundation for organizational resilience in uncertain environments. The dimension of technology-enabled personalization also shows a significant contribution, although less dominant than human-

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related factors. This suggests that technology functions primarily as an enabler rather than a main driver. Technology implementation without a human-centered approach often leads to resistance or suboptimal utilization. Therefore, aligning digital systems with individual needs is essential for maximizing effectiveness.

Furthermore, collaborative knowledge ecosystems and continuous feedback mechanisms strengthen the organizational learning cycle. Collaborative ecosystems facilitate cross-functional knowledge exchange, while continuous feedback ensures ongoing reflection and improvement. These dimensions significantly enhance both innovation capacity and employee engagement. Conceptually, the HCLA model contributes by integrating interdisciplinary perspectives into a coherent strategic framework. It not only explains what organizations should do, but also how to implement these strategies systematically. Thus, this study reinforces the paradigm that sustainable digital transformation depends on balancing technology, human development, and organizational culture.

CONCLUSION

This study concludes that SDGs-driven people-oriented learning environments play a crucial role in strengthening institutional adaptability in the Society 5.0 era. Sustainable institutional transformation requires not only technological advancement but also human-centered values, collaborative learning systems, adaptive leadership, and inclusive organizational participation. The findings demonstrate that institutions capable of integrating sustainability principles with digital innovation are more prepared to respond to rapid social, technological, and organizational changes. The proposed framework highlights five strategic dimensions that support institutional adaptability, namely inclusive learning participation, adaptive institutional leadership, technology-integrated personalization, collaborative sustainability ecosystems, and continuous reflective evaluation. These dimensions collectively contribute to institutional resilience, innovation capacity, employee engagement, and sustainable organizational performance. In this context, technology functions as an enabling instrument that supports human empowerment and sustainable development rather than replacing human interaction and organizational values. The study also confirms that the integration of SDGs principles strengthens institutional commitment toward sustainability, inclusiveness, social responsibility, equitable learning opportunities, collaborative innovation ecosystems, resilient organizational governance, and long-term human development transformation. Furthermore, the Society 5.0 perspective emphasizes human-centered technological integration, inclusive digital innovation, sustainable institutional resilience, adaptive collaborative ecosystems, and transformative organizational learning. These findings indicate that sustainable institutional success depends on the ability to harmonize technological progress with ethical, social, and educational dimensions. From a theoretical perspective, this study contributes to the development of interdisciplinary scholarship by integrating sustainable development theory, organizational adaptability, human-centered learning environments, and Society 5.0 transformation into a unified conceptual framework. Practically, the study provides strategic guidance for policymakers, educational institutions, and organizational leaders in designing sustainable and adaptive learning ecosystems capable of supporting institutional transformation in the contemporary digital era. Ultimately, institutions that successfully develop SDGs-oriented and human-centered learning systems will be better positioned to achieve sustainable growth, strengthen innovation capacity, and contribute positively to global social development in the Society 5.0 era.

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Author Contribution

Walaa Osama contributed to the conceptualization of the study, literature review, theoretical synthesis, data interpretation, framework development, manuscript drafting, and final revision of the article. Aya Said contributed to methodological formulation, analytical interpretation, validation of conceptual findings, discussion development, policy implications, and manuscript review. Both authors collaboratively discussed the research framework, approved the final manuscript, and agreed to be accountable for all aspects of the study related to accuracy, integrity, and scholarly responsibility.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this research article. The study was conducted independently without any commercial, financial, institutional, or personal relationships that could influence the objectivity, interpretation, or presentation of the research findings. Both authors affirm that the manuscript represents original academic work and has not been submitted simultaneously to another publication. Furthermore, the authors confirm that all sources and references used in this study have been appropriately acknowledged according to academic and ethical research standards.

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