

AI Leadership for Technology Adoption in Higher Education: A Conceptual Framework and Validation in Henan Province

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Abstract: *The purpose of this concept paper is to investigate how university administrations in Henan Province, China, may use artificial intelligence to encourage the use of new technologies. Due to transcendent change of AI in education, strong leadership is essential for the seamless integration of AI into both administrative and instructional processes. However, it is found that frameworks that address contextualized unique challenges of AI adoption in academic settings are lacking. This paper proposes a theoretical framework for AI leadership that encompasses salient tenets from extant models, such as the Technology Acceptance Model (TAM), Diffusion of Innovations Theory (DIT), and Transformational Leadership Theory (TLT). In employing the framework, educational leaders will be more equipped to prepare for the AI of the future and building an institution's capacity to adopt emerging technologies. This framework, thus, culminates into a strategic guide directed at creating an ambience of innovation in education. This concept paper presents a pragmatic instrument allowing higher education leaders of Henan to manage the complexity of AI implementation and stimulate onward pedagogical innovation.*

Keywords: AI Leadership, Higher Education, Technology Adoption, Conceptual Framework, Henan Province

1. Introduction

The potential for transformation by AI in higher education spurs innovations in pedagogics, organizational efficiency, and student benefits (Tarisayi, 2023); exploitation of these opportunities and navigation across challenges require enlightened leadership, especially as these technologies become common in educational environments (Begamudra Rangavittal, 2024). For effective AI Leadership, it must not merely focus on promoting technology adoption but to also chiefly develop a culture of innovation to champion the very vision and mission of the institution in the long term (Du et al., 2023).

The institutions of higher learning in Henan Province, China, are seeking out AI-driven solutions for their modernisation and enhanced student success (Yuan, 2024). To address this challenge, it is essential to create a leadership framework that not only considers the unique features of AI but also aligns with the educational objectives and cultural context of Henan's institutions (Sposato, 2024). Without such a framework, AI integration may be disorganized, causing inefficiencies and resistance from faculty and students alike (Pham & Sampson, 2022).

Providing education leaders with a workable understanding of a theoretical basis for AI leadership will assist them in driving this technological transition such that AI is beneficially implemented-and improves learning outcomes, institutional progress, and also tackles challenges faced by regionally-based higher education (Sposato, 2024). This paper thus fills a critical gap in the literature by proposing a tailored approach that supports effective AI integration within Henan's educational landscape (Pham & Sampson, 2022).

The framework aims to empower educational leaders by providing a structured approach to incorporating AI in ways that align with institutional priorities and regional demands. Exactly along this line, leaders will integrate Artificial Intelligence (AI) technologies seamlessly into their work on a larger institutional culture of innovation and resilience; thus: The concept paper intends decision-makers on their approach to addressing the ethical, socio-economic-related challenges, technical issues to crisply, allow these technologies for educational effort rather than disruptive. Ultimately, this leadership framework is designed to help higher education institutions in Henan remain competitive in an increasingly AI-driven global landscape, while addressing the specific needs and circumstances of their local contexts.

2. Literature Review

2.1 AI Leadership in Higher Education

One of the most important factors in determining the effectiveness of technology adoption is leadership, which is becoming increasingly important as AI integration in higher education grows (Shal et al., 2024; Tarisayi, 2023). Such gaps in the literature propel a compelling impetus for a thoroughly shaped artificial intelligence leadership framework designed to cater to the educational field since such leadership is critical in counteracting hurdles such as resistance to change or inadequate technical abilities, which characterize the prime barriers to AI adoption (Madanchian et al., 2024). We find that strategic leadership not only diminishes the risks but promotes leveraging for use of the AI technologies. Articulated leadership notions provide appropriate directives toward resource allocation and skill enhancing instructions, which ensure smooth transitions towards AI documents. This conceptual paper contributes to an active discourse by providing a structured, theory-driven framework to guide HE leaders through the complexities surrounding AI integration (Shal et al., 2024; Valle-Cruz et al., 2024).

2.2 Theoretical Foundations of Leadership and Technology Adoption

Educational leadership has borrowed varying theoretical models in understanding the process of technology adoption, which could be summarized into two categories:

TAM is one of the foremost models, which focuses on perceived usefulness and perceived ease of use as core elements in the user's decision to adopt technology (Davis, 1989). An advantage arises when leaders spell out the tangible benefits of AI while addressing fears about AI's complexity-which sees increasing adoption of educational technologies (Kizilcec, 2023).

And its birth in 1978 established the TLT (Transformational Leadership Theory) by Burns on which developed further by Bass in 1985, where it emphasized the leader's work to motivate and inspire the subordinates into working changes (Shadraconis, 2013). Transformational leaders create pioneering visions that encourage their teams to higher accomplishments and its creative pursuits. In the domain of AI, this style of leadership is meaningful as it nurtures a culture of creativity, encouraging both faculty as well as administrators to explore and adopt AI technologies, thus aiding leadership in driving the change process-Cinderella process by supporting early adopters and developing an institutional dialogue. This leadership style not

only promotes the acceptance of AI but also drives ongoing research and implementation efforts, positioning institutions at the forefront of technological advancements (Shal et al., 2024).

Diffusion of Innovations Theory (DIT): Rogers (2003) developed the Diffusion of Innovations Theory (DIT), which outlines the process by which new technologies are adopted and spread within organizations (Green & Senge, 2011). Those in leadership positions who strategically allocate resources to early adopters and create institutional support for such early adopters ultimately can usher into the phase of accelerated AI adoption that will include a broader engagement and a much smoother transition process. In addition, by properly guiding this process, leaders would minimize resistance and thereby promote a more collaborative, innovation-oriented culture (Pais et al., 2016; Skovgaard & Nielsen, 2023).

2.3 Gaps in Existing Research

Though theoretical models of TAM, TLT, and DIT offer considerable insights into technology adoption, their applicability with respect to AI leadership in higher education has received scant attention (Mhamed Alshref et al., 2021; Sánchez-Prieto et al., 2016). This gap between theory and research pertains, arguably, more efficiently to the regional context of Henan Province, where, for example, limited resources for AI adoption and variable readiness levels have resulted in unique challenges to institutions (Cheng et al., 2023). These challenges act as impediments to the effective implementation of artificial intelligence, which then render the call for a homogenous framework of leadership that would meet the peculiar demands of those educational environments where it would represent some leverage. Absent of this, all the potentials of AI shall be kept unutilized towards educational betterment in these regions. Consequently, further studies are needed to collate the establishment of an all-encompassing framework promoting AI leadership on technological/cultural factors (Schuler & Schlegel, 2021). This article, therefore, seeks to contribute to this gap by formulating an idealized theory-backed strategic framework to help the higher education institutions of Henan with successfully managing the integration of AI.

2.4 Case Studies on AI Leadership in Education

Leadership was claimed from the case studies done on developed and developing countries to have a direct influence on the success of technology adoption (Basu, 2015). Within the developed institutions, dynamic leadership has enabled stakeholders through successful rollout of personalized learning systems, administrative automation and evidence-based decisions (Gaftandzhieva et al., 2023; Tarisayi, 2023). In emerging nations, transformational leadership has been essential for overcoming resource constraints and addressing resistance to new technologies by cultivating a spirit of collaboration and inclusivity within the institution (Gumusluoglu & Ilsev, 2009). However, despite these findings, there have been few studies undertaken in the regional educational context of China, especially Henan Province, where certain challenges to AI implementation persist (Song et al., 2022).

2.5 Technology Leadership vs. Technological Leadership in Education

"Technology Leadership" is a far more widely accepted term in institutions as compared to "Technological Leadership." Both of these terms may be taken as similar; however, there is a subtler distinction: "technology leadership," refers to the agents acting in leadership scope like, any school or district administrator who is responsible for planning and managing technological integration into a classroom (Torrato et al., 2021). This concept covers both the technical management of an institution's IT infrastructure and the interpersonal skills required to lead effectively in environments where technology plays a key role in teaching (Torrato et

al., 2021). The main focus of this type of leadership is on educational technology, systems, and infrastructure.

"Technological Leadership" relates less to classroom environments, yet would artistically or theoretically suggest analysis of technology (Daugherty et al., 2013). General usage associates this phrase with leadership entailed in engineered innovation or development that makes this applicable to STEM fields. This concept has more direction toward the advancement of technology, and less to do with the manner students engage with technology in the flow of everyday classroom activities (Guthrie, 2009).

Why Technology Leaders are Preferred in Education Focus on Application

In education, "Technology Leadership" is the use of different technologies for the enhancement of the administrative aspects, as well as learning and instruction (Hamzah et al., 2010).

Widespread usage: In academic literature, research, and discussions surrounding education, the term technology leadership tends to be more prevalent than magical technoculture that describes how leaders intervene in the management and implementation of technical tools and systems (Dexter, 2018).

Nature: Technology Leadership means a quantity of tasks necessary for the attitude-followings, this includes computing infrastructure, digital literacy enhancements, professional development for teachers, and direction of technology integration into supports for educational practices. The dissimilarity of those tasks is very important for making it very worth your consideration, mainly in the educational sector (Torrato et al., 2021).

Thus, when considering leadership in relation to educational technology, "Technology Leadership" is the right word to employ.

3. Conceptual Framework

The theories that form the conceptual framework for this study are the Transformational Leadership Theory (TLT), the Diffusion of Innovation Theory (DIT), and the Technology Acceptance Model (TAM). This framework is aimed at addressing the peculiar challenges posed by higher educational institutions in Henan Province in promoting successful leadership for the adoption of AI technology. The purpose is to enlighten these leaders to create a conducive environment for developing and implementing AI solutions while balancing institutional objectives with technology during its implementation.

3.1 Application of TAM in AI Leadership

Technology Acceptance Model TAM has been elaborative meant for cite additional ways whereby the top-level management can establish public opinion about AI through the application of the Technology Acceptance Model in this frame (Vu & Lim, 2021). Leaders have a significant influence on how faculty and administrators perceive both the usefulness and ease of use of AI tools (Ofosu-Ampong, 2024). Research suggests that by aligning AI's capabilities with specific institutional objectives, such as improving educational outcomes or optimizing administrative processes, leaders can enhance its perceived ease of use. By affording adequate training and resources, the perceived difficulty with AI can be lowered, which in turn will lead to a more positive attitude toward its acceptance across the institution.

3.2 Role of Transformational Leaders in Innovation

Advance organization culture embraces innovation as imperative for wide acceptance of Artificial Intelligence by institutional leadership. This is, however, in accordance with the Transformational Leadership Theory (TLT) (Lopes et al., 2021). The transformational leader directs change through the expression of a common vision for AI while influencing faculty and staff to be engaged with AI tools (El-Hage & Sidani, 2023). This brings forth team creativity, teamwork, and commitment in risk-taking for AI's effective internalization in education.

3.3 Dissemination of Innovations in adopting Artificial Intelligence

The diffusion of Innovations theory lays certain elements through which leadership can support the widespread adoption of AI technology in the organization (Kurup & Gupta, 2022). It is through identifying the early adopters that a leader is said to help allocate resources so that they are able to test the waters of AI and spread the word of the results (Tarisayi, 2023; Tyson & Sauer, 2021). Continual involvement from leadership is needed to see total organization adoption and integration of AI and not just in departments that show promise (Solaimani & Swaak, 2023; Tarisayi, 2023).

3.4 Framework Synthesis

This framework provides a comprehensive strategy for navigating the complexities of AI integration in higher education by combining the strengths of TAM, TLT, and DIT. By addressing individual perceptions of AI's usefulness and ease of use through TAM, fostering a culture of innovation and collaboration via TLT, and ensuring the widespread diffusion of AI technologies using DIT, it offers a holistic leadership model. This approach equips leaders in Henan's higher education institutions with the tools necessary to manage the transition to AI-driven systems, ultimately promoting sustained technological advancement and improved educational outcomes.

Table 1: Summary of Theoretical Models Used in the Framework

Theoretical Model	Key Aspects	Application in AI Leadership Framework
Technology Acceptance Model (TAM)	Perceived usefulness, ease of use	Helps leaders influence faculty and staff's perceptions of AI technology
Transformational Leadership Theory (TLT)	Inspiring innovation, fostering change	Guides leaders in creating an innovation-friendly culture
Diffusion of Innovations Theory (DIT)	Process of technology diffusion, early adopters	Provides a model for promoting institution-wide adoption of AI

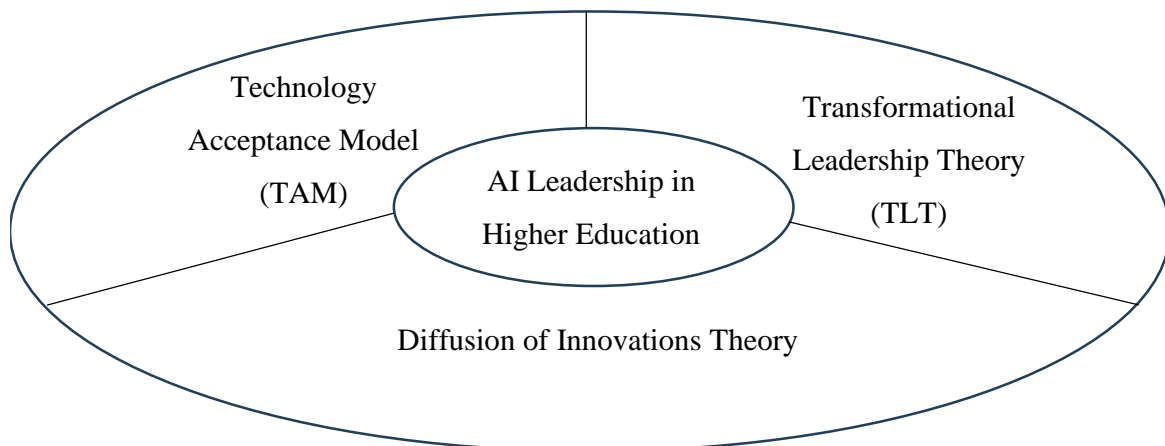


Figure 1: Conceptual Framework for AI Leadership

4. Research Objectives

This paper seeks to meet the specific needs of higher education institutions in Henan Province by developing and presenting a validated theoretical framework for AI leadership. The objective of this framework is to assist school administrators in making informed, strategic decisions on how to effectively integrate AI technologies into their institutions. The key aims of the research are as follows:

- Objective 1: To develop a conceptual framework for AI leadership that is tailored to the specific regional and institutional characteristics of higher education in Henan Province.
- Objective 2: To incorporate and synthesize established theories—Technology Acceptance Model (TAM), Transformational Leadership Theory (TLT), and Diffusion of Innovations Theory (DIT)—into a unified leadership framework for AI integration.
- Objective 3: To offer strategic guidance for institutional leadership in overcoming challenges such as limited resources, technological readiness, and innovative capacity throughout regional higher educations.
- Objective 4: Providing theory recommendatory support for educational leaders to adopt AI strategies and continuous learning and digital transformation within their institutions.

5. Methodology

This concept paper emphasizes theoretical exploration and the development of a conceptual framework, rather than involving the collection or analysis of empirical data. The study proposes a robust AI leadership framework by employing a method centered on the in-depth analysis and synthesis of relevant theoretical models.

5.1 Following Theory-based Approach toward Research

To provide sounder and theoretical support for AI-based undertakings, this conceptual paper utilizes a theory-grounded research approach. The sequence of activities would include:

Existing Theories and Literature Review: This segment in the paper provides a deeper understanding of scholarly writings on technology integration through AI leadership in educational institutions. The review focusses on three important theoretical models: TAM, TLT, and DIT, as well as how they are applied to the context of leadership and AI integration.

Development Framework: A conceptual framework for AI leadership is developed based on the literature review. at order to tackle leadership issues at the universities of Henan Province, this framework combines and synthesises theoretical insights from TAM, TLT, and DIT.

Theoretical Validation: While no empirical validation is performed, the conceptual framework is evaluated for internal consistency, coherence, and applicability to real-world educational settings. Ensuring that the theoretical foundations align with leadership roles, strategies, and dimensions is a key component of this process.

5.2 Theoretical Integration in Framework Construction

The following theoretical models form the basis of the framework development process:

TAM (Technology Acceptance Model): Implementing the Technology Acceptance Model (TAM) into this framework allows us to tackle the issue of how educational professionals perceive AI technologies (Holden & Rada, 2011). Leadership strategies prioritizing enhancing the perceived ease of use and usefulness that managers and faculty receive will improve the chances of AI's adoption (Ma & Lei, 2024).

Transformational Leadership Theory (TLT): This theory leads to venturing university presidents and school administrators to create a go-for-it innovative and change culture for the faculty and staff (Tarisayi, 2023). Transformational leaders play a significant role in creating a supportive atmosphere conducive to moving forward AI adoption by collaboration, team motivation, encouragement of innovative problem-solving approaches, or by directly acting as transformational leaders facilitating the adoption (Abasaheb & Subashini, 2023; Valle-Cruz et al., 2024).

Diffusion of Innovations Theory: Individual TDI provides a brief account of how AI technologies spread across the organizational departments (Radhakrishnan & Chattopadhyay, 2020). Such leadership creates conditions for early adopters of technology via creating an environment of innovation and tracking institutional engagement with AI in an institution-led integration strategy (Sposato, 2024; Valle-Cruz et al., 2024).

5.3 Framework Synthesis

This framework produces an integrated leadership strategy for AI adoption, emphasizing three primary theoretical methods. Leaders can apply this framework to:

- i. Align AI initiatives with institutional goals that guide technology integration.
- ii. Build the leadership capacity needed to foster an innovative and collaborative culture.
- iii. Prepare the institution for the use of AI by providing teachers and staff with the resources and training they need.

5.4 Application of the Framework

The proposed AI leadership framework provides a guide for educational leaders toward AI incorporation in an institution. Thus, school leaders must ensure that AI goals are aligned with their specific institutional objectives for administrative efficiency and improved learning outcomes (Samman, 2024). In TAM, it is explained that leaders act to reduce perceptions of technological complexity by means of training and technical support offered for filling gaps (Daly et al., 2024). TLT encourages leaders to empower their staff by fostering a culture of innovation and allowing faculty and employees the flexibility to explore new AI tools (George & Wooden, 2023). DIT provides support to the leaders in furthering the diffusion of AI technology across the departments, starting with early adopters and full institutional adoption.

Table 2: Key Leadership Strategies for AI Adoption

Leadership Strategy	Description
Tailoring AI Strategies	Ensure AI adoption aligns with the broader mission of the institution
Building Capacity	Offer sufficient training programs to enhance AI adoption
Fostering Institutional Innovation	Encourage faculty to experiment with new AI tools and foster creative problem-solving

6. Findings

This concept paper presents theoretical findings that centre on the insights obtained via the development of the AI leadership framework and the integration of leadership theories. Here are the main conclusions:

6.1 Synthesis of Theoretical Insights

A holistic approach to AI leadership is provided by the integration of TAM, TLT, and DIT within the suggested framework. This approach addresses the complexities of implementing AI in higher education institutions by:

Shaping Perceptions of AI (TAM): Leaders can influence faculty and staff's views on AI by emphasizing its usefulness and ease of use (Kanont et al., 2024; Kim et al., 2020).

Facilitating a Culture for Innovation (TLT): The transformational leadership style is instrumental in creating an organizational culture that promotes change and inspires the academic community to embrace AI (Franciosi, 2012).

Facilitating the Diffusion of AI (DIT): Effective leadership within an institution is critical to enable the adoption of AI technologies from early adopters to a growing number of people (Sriharan et al., 2023).

6.2 Proposed AI Leadership Framework

Education leaders in Henan Province could leverage the structured approach provided by the proposed framework to: Ensure that AI initiatives are aligned with the institution's strategic goals (Ahmad et al., 2023); Foster innovation-capacitated leadership in preparation for effective AI implementation into the institution (Ghnemat et al., 2022); and Promote a culture of innovation that is crucial for the integration of AI technologies institution-wide (Du et al., 2023; Ruiz et al., 2024).

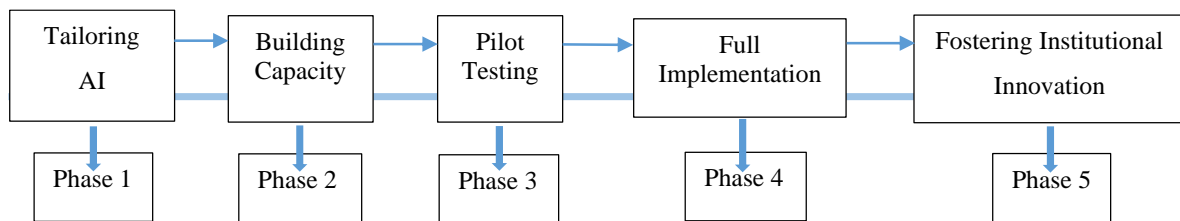


Figure 2: Timeline for AI Leadership Strategy Implementation

6.3 Conceptual Validation

While this study does not cover the empirical testing of the suggested framework, it was conceptually validated by checking that it is consistent with existing theories of leadership and that it can be applied to the unique problems faced by Henan Province's higher education system.

7. Discussion and Implications

From the perspectives of theory and practice of AI leadership, the study's findings will have some far-reaching effects. This discussion extensively elucidates the framework's universal applicability and potential impact on improving leadership practice, shaping policies in institutions, and possibly guiding future research.

7.1 Theoretical Implications

A unified leadership framework that integrates TAM, TLT, and DIT provides several theoretical advantages:

Expanding Leadership Theory: By applying established models to the emerging context of AI in academic institutions, this framework extends the application of leadership theory (Milton & Al-Busaidi, 2023).

Theoretical Integration: The necessary frameworks are based on an integration of Technology Acceptance Model (TAM), Transformational Leadership Theory (TLT), and Diffusion of Innovation Theory (DIT) for answering the research question regarding examining AI

leadership dynamics, especially concerning the regional or developing educational contexts (Alharbi et al., 2022; Dash et al., 2023).

7.2 Practical Implications

This framework extends its influence way beyond leadership practices into the domain of educational policy and institutional strategy. Educational leaders must receive thorough training on aiding the effective integration of AI and incorporate policy into the training programs for achieving such goals (Chan, 2023). Furthermore, this serves as a basis for long-term AI integration into all educational institutions (Black et al., 2024). Including AI leadership into strategic plans must ensure that technological innovations are adopted and are constantly reshaped to meet the educational demands of change (Ahmad et al., 2023; Makarius et al., 2020).

One outcome of the framework guiding its overall reception in leadership practice influences educational policy and institutional strategies and asserts that such frameworks must be in effect at the institution level. Educational leaders can lead the way for effective AI strategic projects while policymakers can set up programming to scrape up this leadership to focus on AI integration (Chan, 2023). The framework also lays very solid groundwork for AI integration into education in the long term (Black et al., 2024). A strategic embedding of AI leadership within the conceptual framework of institutional policy assures that technological innovations are not merely adopted but learnt and adapted into respective paradigms to meet the intended educational pursuits (Ahmad et al., 2023; Makarius et al., 2020).

7.3 Policy Implications

This frame of reference provides implications for the policymakers searching for digital transformation in higher education: Such leadership training programs should, in fact, be expressly enjoined to instill the skill against AI adoption in post-decolonial leadership (Sposato, 2024). Concern for Ethical Issues: AI technology raises serious ethical concerns about bias and privacy of data (Huang, 2023). In solving these problems, the policy officer must place an emphasis on proposing a clear outline for concrete application deliverables pertaining to AI in education (Huriye, 2023; Sywelem & Mahklouf, 2024).

7.4 Value of This Research

The new AI leadership framework is one of vast theoretical and practical means of the application (Madanchian et al., 2024; Sposato, 2024). Integrating the elements of the technology acceptance model, transformative leadership theory, and Disruptive Innovation Theory provides highly abstract theorizing constructs of how leadership shapes the uptake of AI in higher education. As thus, this template alludes to a plan through which education leaders may architect their strategy regarding engagements in AI initiatives, innovation promotion, and capacity strengthening- whilst keeping in alignment with institutional goals (Ahmad et al., 2023)

7.5 Limitations and Directions for Future Research

The concepts put forth in this paper are not without several limitations: other than proofing, this framework has not yet been tested in-field. Future research ought to verify its applicability through field studies based on data (Misra et al., 2014). Contextual Specificity: Given that the framework was thus designed with the perspective of the HEIs in Henan Province, its interface posed with other regions and contexts remains accessibly dubious. Future directions for research should understandably focus at how this framework can be catered to diverse cultural and institutional contexts (Bala & Roets, 2022).

7.6 Final Remarks

The use of AI technologies in higher education will only be successful with strong leadership. The theoretical framework presented in this concept paper provides educational leaders with both theoretical grounding and practical resources of use in their work. The framework in the work incorporates classic theories of leadership to address the myriad challenges posed by the adoption of AI that will enable organizations to solve the tricky puzzles imposed by digital transformation.

8. Recommendations for Future Research and Practice

This concept paper proposes an intelligence leadership framework aimed at elucidating the leader's role in the implementation and dissemination of artificial intelligence technologies in academic institutions. It also proposes a substantial theoretical basis that leads to different avenues for future empirical research and practical implementations.

8.1 Future Research Directions

The very theoretical nature of this study implies that a working AI leadership framework stands to be evaluated further regarding its plausible application to the real work front. Key questions for future research include:

Empirical Validation of the Framework: Future studies should empirically assess the framework's effectiveness by collecting both quantitative and qualitative data from a range of higher education institutions, particularly in Henan Province and similar regional contexts. Such evaluation would clearly set the stage for evaluating the probability that the framework may find expression in guiding AI leadership and technology adoption (Chiu, 2024).

Cross-region and cross-cultural applications: Given that it was originally developed for higher-learning institutions in Henan Province, research could also evaluate how generalizable the framework is to different locations and cultural contexts (Fan & Chano, 2024). The framework's adaptability and scalability in various situations can be determined by conducting comparative studies across different countries or educational systems (Dimmock & Walker, 1998; Walker & Dimmock, 1999).

Longitudinal Studies on AI Leadership: Given the dynamic nature of AI, longitudinal studies would be useful for tracking the evolution of leadership practices and institutional initiatives in response to the new capabilities and challenges posed by AI (Wang & Siau, 2018).

8.2 Recommendations for Educational Leaders

The following advice is presented to school leaders and administrators who are considering implementing the proposed AI leadership framework:

Align AI Initiatives with Institutional Strategy: Those in charge of educational institutions should make sure that implementing AI is in line with their long-term objectives (George & Wooden, 2023). Artificial intelligence (AI) is not a standalone innovation, but rather a tool that can help institutions achieve their larger goals, such as raising the bar for instruction, bettering students' academic performance, and streamlining internal operations (Srivastava et al., 2020).

Invest in Leadership and Capacity Building: Organisations should put money into programs that help leaders improve and strengthen their skills, with an emphasis on AI strategy and execution (Day et al., 2021). Leaders should be able to adapt to new technologies and encourage a spirit of innovation in their organisations after completing these programs (Cremer & Narayanan, 2023).

Promote an Innovation-Friendly Culture: Organisational leaders should foster a culture that supports staff and faculty in exploring new AI tools and technologies (Mirzani, 2024). To achieve this goal, it is essential to foster an atmosphere that encourages risk-taking and innovative problem-solving in addition to offering the appropriate tools and training (Zhu, 2015).

9. Conclusion

This concept paper lays out an all-encompassing artificial intelligence leadership structure designed with Henan Province's higher education institutions in mind. The framework provides educational leaders with a practical strategy to promote the adoption of AI by merging TAM, TLT, and DIT. The theoretical integration that the study offers a fresh perspective on AI leadership in education and is thus the principal contribution of the study. Research in the future should concentrate on putting the framework to the test in real-world settings and investigating its potential uses in other types of education. This framework provides a strategic tool for institutions to maintain innovation and promote a learning environment driven by technology.

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