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Analyzing Educational Managers' Readiness for Chat GPT Adoption Using a Cross-Relationship Matrix: A Quantitative Investigation

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Abstract

Purpose of the Study: The purpose of this research study was to explore the factors influencing the readiness of educational managers for the adoption of Chat GPT in higher education, specifically within the Social Sciences faculties of universities in Lahore, Pakistan.

Methodology

A cross-relationship matrix and semantic differential scale were used to examine the interrelations between optimism, innovativeness, discomfort, insecurity, and overall readiness for Chat GPT adoption. The sample consisted of 79 educational managers from universities in Lahore, selected through a simple random sampling technique. Descriptive and inferential statistics were applied to analyze the data and identify significant correlations among the variables.

Main Findings

The findings of the study revealed significant positive correlations between optimism and innovativeness, suggesting that educational managers who are more optimistic are also more inclined to adopt innovative practices related to AI technologies. Furthermore, optimism was found to be negatively correlated with both discomfort and insecurity, indicating that optimistic attitudes help reduce psychological barriers to AI adoption. While discomfort and insecurity are typically seen as inhibitors of technological adoption, the study found that these factors also positively correlated with readiness, implying that these emotional responses may motivate managers to take proactive steps in preparing for AI integration. Innovativeness emerged as a crucial determinant of readiness, with managers who exhibited higher levels of innovativeness being more prepared to explore and implement Chat GPT in their institutions. Overall, the study highlights the complex interplay of psychological factors and their influence on AI adoption readiness.

Application of this Study

The findings of this study provide valuable insights into the psychological factors influencing the readiness of educational managers to adopt Chat GPT in higher education. The results can inform university administrators and policymakers in Lahore and beyond, helping them design targeted strategies to foster an environment conducive to AI adoption. By focusing on enhancing optimism, innovativeness, and addressing discomfort and insecurity, educational institutions can better prepare their managers for the successful integration of AI tools such as Chat GPT.

Novelty/Originality of this Study

This study is original as it is the first to investigate the factors influencing the readiness of educational managers for the adoption of Chat GPT and other AI technologies within the Social Sciences faculties of universities in Lahore, Pakistan. The research contributes new insights into the psychological dimensions of technology adoption in higher education, particularly in the context of AI.

Keywords

Educational Managers, AI Adoption, Chat GPT, Technological Readiness, Optimism, Innovativeness, Semantic Differential, Cross-Relationship Matrix, Technology Management.

Introduction

In recent years, higher education has experienced a significant digital transformation, fueled by rapid technological advancements. Among these innovations, Artificial Intelligence (AI) tools such as Chat GPT have emerged as key drivers of change in educational institutions worldwide. AI's integration into higher education systems has redefined administrative functions, personalized learning experiences, and revolutionized institutional management practices (Bisen et al., 2021). AI tools like Chat GPT are increasingly being deployed to streamline administrative tasks, enhance communication between students and staff, provide real time feedback, and support content creation, thus improving efficiency and reducing the administrative burden on educators (Neumann, Rauschenberg, & Schön, 2023). The potential of AI in transforming higher education is undeniable, but its successful adoption largely depends on the readiness of educational managers. These managers are at the forefront of decision making processes related to technology integration and digital transformation in educational institutions. Their ability to navigate technological shifts, lead innovation, and manage digital changes is critical for the successful implementation of AI tools, particularly in administrative and pedagogical practices (Kim & Kim, 2022). Readiness, in this context, refers to the extent to which educational managers possess the necessary technological competence, openness to innovation, and institutional support to adopt and implement AI tools effectively (Fauzi et al., 2023). Therefore, evaluating the readiness of educational managers is crucial for understanding how AI tools, especially Chat GPT, can be integrated into higher education settings to maximize their potential. Despite the substantial potential of AI tools like Chat GPT in transforming higher education management, there is a significant gap in the literature regarding the readiness of educational managers to adopt these technologies. Although numerous studies have emphasized the importance of digital transformation in education (Sandu, Gide, & Elkhodr, 2024), few have specifically focused on the readiness of educational managers to embrace AI tools, particularly in the context of administrative functions and institutional leadership. While educational managers acknowledge the value of AI, their preparedness to implement these tools effectively remains under-explored (Perkins, 2023). A recent study by Bisen et al. (2021) highlighted that despite growing recognition of AI's potential,

the adoption rate within educational institutions remains slow. Barriers such as technological illiteracy, perceived complexity of AI tools, and high costs continue to hinder the integration of these technologies in educational settings. Additionally, Kim and Kim (2022) found that while educational manager's express optimism about AI, challenges such as organizational resistance, insufficient infrastructure, and lack of specialized training often impede the adoption process. These gaps in the literature suggest that a deeper understanding of the factors influencing the readiness of educational managers to adopt AI tools is necessary. Addressing these challenges will be critical to ensuring the successful integration of AI technologies, enabling them to enhance teaching, learning, and institutional management. This research aims to fill this gap by exploring the readiness of educational managers for the adoption of Chat GPT and other AI technologies in higher education. Specifically, it seeks to examine the factors that influence their willingness to integrate these tools into their institutions and identify the psychological and organizational barriers that may impact their adoption decisions.

This study was carried out to achieve the following objectives

To examine the cross-relationship between optimism and innovativeness among educational managers.

To explore the relationship between discomfort and insecurity and their impact on AI adoption readiness.

To investigate the combined effect of optimism, innovativeness, discomfort, and insecurity on the overall readiness for AI adoption.

To identify and analyze the specific dimensions of optimism, innovativeness, discomfort, and insecurity that influence educational managers' readiness to adopt AI tools like Chat GPT.

By addressing these objectives, this study aims to provide a comprehensive understanding of the factors that shape the readiness of educational managers in adopting AI technologies in higher education, offering practical insights for policymakers and institutional leaders looking to facilitate successful digital transformations.

literature review

Several key theories offer valuable insights into understanding technology adoption in educational settings, particularly the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT). The Technology Acceptance Model (TAM), proposed by Davis (1989), posits that perceived ease of use and perceived usefulness are central factors in determining whether individuals adopt new technologies. This model has been widely applied in educational contexts to evaluate the readiness of educators and administrators in integrating technology (Venkatesh & Davis, 2000). According to TAM, when individuals perceive a technology as easy to use and beneficial, their intention to adopt it increases. In contrast, Innovation Diffusion Theory (IDT), proposed by Rogers (2003), provides a broader framework for understanding how innovations spread within a social system. IDT emphasizes several key factors, including relative advantage, compatibility, complexity, trial ability, and observability, all of which influence the rate of adoption of new technologies. These factors also align with the characteristics of educational institutions, where the success of technology integration depends on how compatible and advantageous the innovation is perceived within the institution's environment.

In the context of educational management, these theories provide a framework to understand how educational managers' perceptions of AI technologies, such as ChatGPT, influence their adoption decisions. For instance, when educational managers perceive that AI tools like ChatGPT are user-

friendly and offer clear benefits, their readiness to adopt such tools increases. Both TAM and IDT underscore the importance of organizational culture, leadership, and external pressures in shaping attitudes toward technology adoption. As decision-makers, educational managers play a pivotal role in mediating these factors and facilitating the integration of new technologies within their institutions (Venkatesh et al., 2003; Rogers, 2003). Readiness for technology adoption refers to the preparedness of individuals or organizations to integrate new technologies into their existing systems and processes (Bordia et al., 2017). In educational settings, readiness encompasses several critical factors, including attitudes toward technology, perceived benefits, organizational culture, and the availability of technological infrastructure (Sok & Heng, 2024). Attitudes toward technology play a crucial role in determining whether educational managers are likely to adopt AI tools. Positive attitudes, such as optimism, can significantly enhance an individual's willingness to embrace new technologies. Educational managers who are optimistic about AI in education tend to believe that tools like ChatGPT can streamline administrative tasks, improve student support services, and boost institutional efficiency (Shi et al., 2020). Conversely, negative attitudes or skepticism may hinder the adoption process. The perceived benefits of technology adoption also significantly influence readiness. Managers who see clear advantages, such as reduced workload, better decision-making, and personalized learning experiences, are more likely to adopt AI tools (Akpan et al., 2024). In educational institutions, managers often perceive AI as a tool for enhancing operational efficiency, as well as improving student outcomes (Raza, 2023).

Moreover, organizational culture plays a significant role in fostering or impeding technology adoption. Institutions with a culture of innovation and openness to technological change are more likely to support the integration of new tools like Chat GPT (Sallam et al., 2023). When a culture of innovation exists, managers are more likely to feel supported in their efforts to integrate AI technologies. Technological infrastructure, such as reliable internet access, technical support, and robust data security systems, is also crucial in determining an institution's readiness to adopt AI tools (Xu, 2024). If these infrastructures are lacking or inadequate, managers may hesitate to implement AI technologies due to concerns about functionality and security. The role of AI in education has gained significant attention in recent years, with AI powered tools offering transformative possibilities for enhancing both teaching and administrative practices. Chat GPT, a generative AI model developed by Open AI, is one such tool that has the potential to revolutionize educational management. It can assist in automating administrative tasks, providing real time support to students and staff, and even generating personalized learning content (Romero, 2024). Chat GPT's natural language processing capabilities make it an effective tool for improving communication between students, faculty, and administrators, thereby enhancing collaboration and operational efficiency.

In educational contexts, AI tools like Chat GPT are transforming how educational managers handle administrative functions, such as scheduling, communication, and resource management. AI's ability to analyze large datasets allows it to assist in making data-driven decisions about curriculum development, resource allocation, and student support (Zurniati et al., 2024). This can result in optimized institutional performance, especially as AI tools can offer personalized insights for students and educators alike. According to Hashim et al. (2022), AI systems are capable of adapting educational content to meet the individual needs of students, fostering increased engagement and improving learning outcomes. Despite these advantages, the integration of AI tools like Chat GPT faces several challenges.

Ethical concerns, including data privacy, algorithmic bias, and the potential for AI to replace human jobs, have raised questions about the responsible use of AI in educational settings (Klimova et al., 2023). As Abdel fattah et al. (2024) argue, the development of ethical frameworks to guide

AI adoption is crucial to ensuring fair, transparent, and accountable use. Institutions must also develop guidelines to mitigate risks associated with AI's misuse, and provide comprehensive training for educational managers to ensure they are equipped to manage these technologies responsibly (Romero, 2024).

Research gaps

While there is substantial literature on the adoption of AI technologies in education, there remains a critical gap in understanding the readiness of educational managers specifically for adopting ChatGPT. Most studies have focused on general AI adoption, with limited attention given to the psychological and behavioral factors that influence educational managers' decision-making (Chen et al., 2023; Bordia et al., 2017). Furthermore, the interplay between factors such as optimism, innovativeness, discomfort, and insecurity, in the context of AI tools like Chat GPT, remains underexplored. There is also a need for more research into how organizational culture and technological infrastructure affect the adoption of AI tools by educational managers. While previous studies have emphasized the importance of organizational culture in facilitating or hindering technology adoption (Kaasinen et al., 2020), there is a lack of comprehensive research exploring the specific challenges faced by educational managers when adopting AI tools like Chat GPT. This study aims to fill these gaps by examining how psychological factors, such as attitudes and perceived benefits, interact with organizational and technological factors to influence educational managers' readiness for Chat GPT adoption. By focusing on these factors, this research seeks to provide new insights into the challenges and opportunities presented by AI in educational management, particularly in the context of higher education.

Methodology

This study employed a quantitative, correlational, and cross-sectional research design to investigate educational managers' readiness for adopting ChatGPT in higher education institutions (HEIs) in Lahore, Pakistan. The correlational design allowed for examining relationships between key variables such as optimism, innovativeness, discomfort, insecurity, and overall readiness, while the cross-sectional nature ensured data were captured at a single point in time, reflecting the current state of readiness. The target population comprised 30 Deans and 126 Heads of Departments (HODs) from the Social Sciences faculties of public and private universities. These participants were chosen due to their pivotal roles in institutional decision-making processes, particularly regarding technology adoption and curriculum development. A stratified random sampling technique was used to ensure diversity in responses, with strata defined by institutional type (public vs. private), gender, qualification, and professional experience. This approach provided a representative sample, enhancing the validity of the findings. Data were collected through a 23-item survey questionnaire developed based on the Technology Readiness Index (TRI) model, which has been widely validated in technology adoption research. The development and validation of the Educational Managers' Readiness for ChatGPT scale mark a key advancement in educational technology, particularly as Pakistan adopts artificial intelligence (AI) tools. This scale offers a systematic method to assess the readiness of educational managers to integrate and utilize ChatGPT effectively in higher education settings (Zaidi et al., 2024). The survey focused on four key constructs: optimism, innovativeness, discomfort, and insecurity. A semantic differential scale ranging from 1 (Low) to 6 (High) was employed to measure participants' attitudes, with bipolar adjectives reflecting readiness levels.

To ensure the reliability and validity of the instrument, a pilot study was conducted with 31 participants (9 Deans and 22 HODs) from two universities in Lahore. Feedback from this exercise informed refinements to the questionnaire, addressing issues of clarity, relevance, and alignment with research objectives. The instrument's reliability was confirmed with a Cronbach's alpha of 0.87, indicating high internal consistency, with subscale values ranging from 0.72 to 0.81 for optimism, innovativeness, discomfort, and insecurity. The survey was administered over three months using both online and offline methods to maximize accessibility. The online version was distributed via email, while the offline version was conducted in person for respondents who preferred non-digital platforms. A total of 156 completed surveys were received, representing an 85% response rate, ensuring robust data for analysis. The collected data were analyzed using descriptive and inferential statistics. Descriptive statistics summarized demographic characteristics and overall readiness levels, while Pearson correlation analysis assessed the relationships between optimism, innovativeness, discomfort, insecurity, and readiness for ChatGPT. A Cross-Relationship Matrix (CRM) was utilized to map interactions between these constructs, providing a comprehensive view of the factors influencing readiness. Positive correlations indicated alignment between constructs, while negative correlations highlighted potential barriers. This rigorous methodology provided valuable insights into the readiness of educational managers for ChatGPT adoption, contributing to the understanding of technology integration in higher education.

Data analysis Cross Relationship Matrix

	OPT	INO	DIS	INS	Readiness
OPT	1	r=.711** p=0.00	r=468** p=0.00	r=345** p=.002	r=.405** p=0.00
INO	r=.711** p=0.00	1	r=386** p=0.00	r350** p=.002	r=.429** p=0.00
DIS	r=468** p=0.00	r=386** p=0.00	1	r=.555** p=0.00	r=.458** p=0.00
INS	r=345** p=.002	r=350** p=.002	r=.555** p=0.00	1	r=.549** p=0.00
Readiness	r=.405** p=0.00	r=.429** p=0.00	r=.458** p=0.00	r=.549** p=0.00	1
N=79					

Relationship Matrix of Educational Managers' Readiness for Chat GPT

Correlation is significant at the 0.01 level (2-tailed).

The data collected from 79 educational managers, comprising 12 Deans and 67 Heads of Departments (HODs) from higher education institutions in Lahore, were analyzed. All responses were complete and deemed valid for statistical evaluation. The analysis aimed to investigate the interrelationships among the constructs of optimism, innovativeness, discomfort, insecurity, and overall readiness for ChatGPT adoption. Pearson correlation coefficients were employed to explore the strength and direction of the relationships between these constructs. Optimism and innovativeness demonstrated significant positive correlations with readiness, indicating their facilitative role in fostering a favorable attitude toward ChatGPT integration. Conversely, discomfort and insecurity exhibited negative correlations, highlighting their potential as barriers to adoption. A Cross-Relationships Matrix (CRM) was constructed to provide a detailed visualization of these interrelationships, offering deeper insights into the dynamics influencing readiness levels among educational managers. The findings elucidated critical factors shaping the readiness of educational managers for Chat GPT adoption, underscoring the nuanced interplay of technological, psychological, and organizational dimensions in the context of AI integration in higher education.

Results

The Cross-Relationship Matrix demonstrates the interconnections among various factors influencing educational managers' readiness for adopting Chat GPT. Each correlation coefficient provides a measure of the strength and direction of the relationship between pairs of variables. Significant correlations are marked with asterisks, indicating a high level of statistical significance (p < 0.01).

Optimism and Innovativeness

A strong positive correlation (r = .711, p < 0.01) suggests that educational managers who are optimistic tend to also be more innovative. This aligns with the idea that a positive outlook can drive openness to novel approaches and new technologies, contributing to a forward-thinking mindset.

Optimism and Discomfort

The negative correlation (r = -.468, p < 0.01) between optimism and discomfort indicates that optimistic managers are less likely to experience discomfort when adopting new technologies. This suggests that optimism acts as a psychological buffer, reducing resistance to technological change.

Innovativeness and Discomfort

The negative correlation (r = -.386, p < 0.01) between innovativeness and discomfort suggests that managers who are more innovative are less likely to experience discomfort during the adoption process. This reflects the proactive nature of innovative individuals who seek solutions to overcome challenges.

Discomfort and Insecurity

A strong positive correlation (r = .555, p < 0.01) exists between discomfort and insecurity, indicating that discomfort may be accompanied by feelings of insecurity. This relationship suggests that as managers experience unease with the adoption of Chat GPT, they may also face doubts about their own readiness or the readiness of their institution.

Insecurity and Readiness

Interestingly, insecurity shows a positive correlation with readiness (r = .549, p < 0.01), which implies that while insecurity might initially seem like a barrier, it may also prompt managers to take more deliberate steps to prepare for adoption. This suggests that feelings of insecurity could drive individuals to seek more information, resources, or training to enhance their readiness.

Readiness and Other Variables

Readiness is positively correlated with all four factors: Optimism (r = .405, p < 0.01), Innovativeness (r = .429, p < 0.01), Discomfort (r = .458, p < 0.01), and Insecurity (r = .549, p < 0.01). This confirms that readiness is a multifaceted construct influenced by a combination of positive and negative psychological and cognitive factors.

Findings

Strong positive correlation with Innovativeness (INO, r = .711, p < .01) suggests that managers with a positive outlook tend to be more innovative. Moderate negative correlations with Discomfort (DIS, r = ..468, p < .01) and Insecurity (INS, r = ..345, p = .002) indicate that optimistic managers experience fewer barriers when approaching new technology.

Negative correlation with both Discomfort (DIS, r = -.386, p < .01) and Insecurity (INS, r = -.350, p = .002) indicates that innovative managers are less hindered by psychological barriers like discomfort or insecurity. Its strong positive correlation with Readiness (r = .429, p < .01) underscores that innovation drives preparedness for Chat GPT adoption.

Positively correlated with Insecurity (INS, r = .555, p < .01), suggesting that higher levels of discomfort often align with increased feelings of insecurity. Moderate positive correlation with Readiness (r = .458, p < .01) reveals that managers feeling discomfort may prepare more actively, viewing discomfort as a motivator for readiness.

Strong positive correlation with Readiness (r = .549, p < .01) suggests that managers who feel insecure may engage in efforts to build competence and confidence, which boosts readiness. Its relationship with DIS further supports the notion that managing insecurities is critical for mitigating discomfort-related barriers.

Discussion

The results of this study provide a comprehensive understanding of the factors influencing educational managers' readiness for adopting AI technologies like ChatGPT in higher education. The Cross-Relationship Matrix revealed both positive and negative relationships among key factors, including optimism, innovativeness, discomfort, insecurity, and readiness.

The significant positive correlation between optimism and innovativeness suggests that educational managers with a positive outlook are more likely to embrace innovative solutions. This is in line with prior research that indicates that a positive mindset is critical for the successful adoption of technology in educational settings (Leech et al., 2019). Optimism appears to serve as a catalyst for adopting AI tools, as it enables managers to see the potential benefits and opportunities of new technologies, rather than focusing on the challenges. Furthermore, the negative relationship between optimism and discomfort underscores the mitigating effect of optimism on psychological barriers, such as anxiety or resistance, towards adopting new

technologies (Venkatesh et al., 2003). Managers who are optimistic may be less likely to experience resistance, thereby fostering smoother integration of AI technologies like ChatGPT.

Innovativen**ess** was found to have a robust positive correlation with readiness, emphasizing that managers who exhibit innovative tendencies are more likely to be prepared to adopt AI tools. This is consistent with the work of Alharbi and Drew (2014), who found that innovative leaders are more willing to explore and implement new technologies. The negative correlations between innovativen**ess** and both discomfort and insecurity suggest that innovative managers are less likely to experience negative emotional responses toward AI adoption. This finding reinforces the idea that innovation-driven managers proactively seek solutions to address any challenges or concerns related to new technology (Agarwal & Prasad, 1997).

Interestingly, the study also revealed that discomfort and insecurity are positively correlated with readiness, albeit in a more nuanced way. Discomfort and insecurity were found to contribute to readiness, suggesting that feelings of discomfort or insecurity, typically seen as barriers to technology adoption, may drive managers to engage more deeply in preparation and problem-solving efforts. This paradoxical finding suggests that discomfort might not only indicate resistance but may also reflect a constructive engagement with the process of technological adoption (Garcia et al., 2018). Educational managers experiencing discomfort may be more likely to seek out additional training or resources to alleviate uncertainty, thereby enhancing their overall readiness for ChatGPT integration.

Finally, readiness itself exhibited significant correlations with all four variables optimism, innovativeness, discomfort, and insecurity which collectively contribute to managers' readiness for the adoption of ChatGPT. The results highlight the multifaceted nature of readiness, wherein both enabling factors (optimism and innovativeness) and inhibiting factors (discomfort and insecurity) play interconnected roles in shaping the decision to adopt AI tools.

Conclusion

The findings of this study make valuable theoretical contributions to the field of educational technology management. By examining the interplay of psychological factors optimism, innovativeness, discomfort, and insecurity with technological readiness, this research provides a nuanced understanding of AI adoption in educational settings. It extends the Technology Acceptance Model (TAM) (Davis, 1989) by incorporating emotional dimensions, such as discomfort and insecurity, which are often overlooked in previous studies. These findings suggest that even traditionally negative emotions can serve as catalysts for readiness if managed effectively, challenging the conventional view that such emotions are purely barriers.

From a practical perspective, the study underscores the importance of fostering optimism and innovativeness among educational managers. Leadership development programs and targeted training can help reduce barriers associated with discomfort and insecurity, enabling managers to approach AI adoption with confidence. Institutions can use emotional responses as opportunities for growth by offering tailored workshops and mentorship programs to address uncertainties.

For policymakers, the study highlights the need for strategies that integrate psychological and technological considerations. Promoting emotional intelligence training and innovation-driven leadership, alongside providing clear guidelines for AI implementation, can facilitate smoother transitions in educational institutions.

In alignment with prior studies (e.g., Venkatesh et al., 2003; Agarwal & Prasad, 1997), this research confirms the positive correlation between optimism, innovativeness, and readiness. However, it offers novel insights by revealing the constructive potential of discomfort and

insecurity in driving engagement with AI adoption. These findings enrich the existing literature on technology readiness and provide a more holistic framework for understanding the emotional and psychological dynamics of AI integration in higher education.

limitations and study forward

This study focused on educational managers within the Social Sciences faculty at universities in Lahore, Pakistan, offering a detailed analysis of AI readiness within a specific geographical and disciplinary context. While this delimitation limits generalizability, it provides valuable insights into early adoption patterns in an urban, diverse, and educationally advanced setting. The findings are particularly relevant for institutions in similar socio-economic and cultural contexts.

The use of a semantic differential scale (1 to 6) was a key strength, enabling nuanced measurement of readiness without a neutral option, which minimized central tendency bias and encouraged thoughtful responses. However, the absence of qualitative methods or mixed approaches limits the exploration of deeper psychological factors, such as self-efficacy and technological anxiety. Future research could broaden the scope by replicating this study across different disciplines (e.g., STEM or Arts) or regions to identify cross-disciplinary and geographical variations in readiness. Longitudinal studies could also track changes in readiness over time as managers gain AI experience. Incorporating qualitative or mixed methods could further explore emotional and psychological drivers of readiness, providing a more holistic understanding of AI adoption in education.

Recommendations

Based on the findings, several practical recommendations can be made for educational managers and policymakers to facilitate AI adoption like Chat GPT:

Educational institutions should invest in programs that encourage an optimistic mindset among educational managers. Workshops, seminars, and professional development opportunities focusing on the benefits and future potential of AI technologies like Chat GPT can help shift managers' attitudes toward more positive outlooks. Additionally, fostering a culture of innovation can further enhance readiness, with managers being more inclined to explore new technologies and lead AI adoption efforts.

While discomfort and insecurity were found to be positively correlated with readiness, these feelings need to be managed constructively. Institutions should provide support structures, such as training sessions, mentoring, and peer collaboration, to help educational managers overcome initial apprehensions. Providing clear and consistent communication about the benefits and implementation strategies of AI tools can also mitigate feelings of insecurity.

Given the complexity of AI adoption, it is essential that educational managers collaborate with other stakeholders, such as IT staff, academic leaders, and policymakers, to align resources and strategies for AI integration. Collaboration can ease the anxiety surrounding technological change by building a collective vision for the future.

Educational institutions should recognize that readiness for AI adoption is not a one-size fits all approach. Different institutions, even within the same region, may face unique challenges based on their institutional culture, resources, and faculty composition. Developing customized adoption plans based on the specific needs and readiness levels of individual institutions can increase the likelihood of successful integration. Institutions should regularly evaluate the readiness of their educational managers for AI adoption through continuous assessments, feedback loops, and updates on emerging AI technologies. This will ensure that readiness is consistently nurtured and that managers are equipped to handle future technological advancements.

References

- 1. Abdelfattah, M., et al. (2024). Ethical frameworks for AI adoption in education. Journal of Educational Technology, 12(3), 45-58.
- 2. Agarwal, R., & Prasad, J. (1997). The role of innovation characteristics and perceived voluntary in the acceptance of information technologies. Decision Sciences, 28(3), 557-582. https://doi.org/10.1111/j.1540-5915.1997.tb01321.x
- 3. Akpan, I., et al. (2024). Perceived benefits of AI tools in higher education. International Journal of AI in Education, 17(2), 78-91.
- Alharbi, A., & Drew, S. (2014). Technology acceptance in higher education: A study of the factors affecting faculty's acceptance of learning management systems. International Journal of Information Technology and Management, 13(2), 154-168. https://doi.org/10.1504/IJITM.2014.060508
- 5. Ansari, M., Ahmad, F., & Bhutta, M. (2024). Psychological factors influencing technology adoption in education. Educational Technology Review, 25(4), 130-142.
- 6. Atlas, A. (2023). Ethical dilemmas in AI adoption: A case study. Educational Ethics Journal, 19(2), 200-210.
- Bisen, P., Arslan, H., Yildirim, A., & Yildirim, S. (2021). The impact of artificial intelligence on education: A systematic review. Journal of Educational Technology & Society, 24(3), 50-60.
- 8. Bordia, P., et al. (2017). Organizational readiness for technology adoption. Journal of Organizational Behavior, 31(5), 521-539.
- 9. Chen, Y., et al. (2023). A study of managerial attitudes toward AI technologies in education. Journal of Educational Administration, 28(1), 12-26.
- 10. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340. https://doi.org/10.2307/249008
- 11. Fauzi, M., Mutongoza, S., & Olawale, O. (2023). Technological readiness for AI integration in higher education. Education and Information Technologies, 28(2), 385-401.
- Garcia, M., Thong, J. Y. L., & Lee, M. K. O. (2018). Exploring the role of emotions in technology adoption: A study of mobile health applications. Information & Management, 55(7), 812-824. https://doi.org/10.1016/j.im.2018.04.002
- 13. Gligorea, G., et al. (2023). Ethical implications of AI in education. AI and Education Journal, 4(1), 67-79.
- 14. Kaasinen, E., et al. (2020). Organizational culture and technology adoption in educational institutions. Journal of Higher Education Management, 35(2), 89-104.
- 15. Kim, Y., & Kim, S. (2022). Educational managers' perceptions of AI: A study on readiness for AI adoption. Higher Education Research and Development, 41(5), 987-1001.
- 16. Klimova, B., Pikhart, M., & Kacetl, J. (2023). Addressing AI adoption challenges in education: Privacy, bias, and fairness. Journal of Educational Technology Ethics, 10(1), 45-63.
- 17. Leech, N. L., Barrett, K. C., & Morgan, G. A. (2019). SPSS for introductory statistics: Use and interpretation (6th ed.). Routledge.
- 18. Mbwambo, E., & Kaaya, E. (2024). The role of AI tools in personalized learning. AI in Education Review, 2(4), 25-40.
- 19. Neumann, R., Rauschenberger, S., & Schön, A. (2023). ChatGPT in educational management: Transforming administrative tasks. Computers & Education, 191, 104575.
- 20. Opara, D., et al. (2023). Automating administrative tasks using AI: A ChatGPT perspective. Journal of Educational Technology Studies, 18(3), 110-120.

- 21. Pallant, J. (2020). SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS (7th ed.). Open University Press.
- 22. Perkins, J. (2023). Overcoming barriers to AI adoption in higher education. Journal of Educational Administration, 61(4), 245-259.
- 23. Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.
- 24. Romero, F. (2024). ChatGPT in higher education: Implications and applications. AI and Learning Journal, 7(1), 33-45.
- 25. Sandu, T., Gide, O., & Elkhodr, M. (2024). Exploring the challenges of digital transformation in higher education. Educational Technology Research & Development, 72(1), 41-58.
- 26. Sauer, P. L., Gable, M., & Smallwood, E. (2018). Managing emotions in technology adoption: Understanding how emotions drive success. Journal of Organizational Behavior, 39(6), 788-804. https://doi.org/10.1002/job.2260
- 27. Shi, Z., et al. (2020). Understanding discomfort and insecurity in AI adoption in educational institutions. Educational Technology and Society, 23(4), 75-89.
- 28. Sok, K., & Heng, S. (2024). Readiness for technology adoption in education. Journal of Educational Technology Integration, 11(1), 101-113.
- 29. V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478. https://doi.org/10.2307/30036540
- 30. Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model. Management Science, 46(2), 186-204.
- Yunus, M., Whitfield, R., & Sayed Mostafa, M. (2023). Innovative thinking in AI adoption among educational leaders. International Journal of Educational Management, 37(6), 522-536.
- Zaidi, S. S., Iqbal, M. Z., Ahmad, H., & Atiq, M. S. (2024). Development of Educational Managers' Readiness Scale for Chat-GPT. *Social Science Review Archives*, 2(2), 1511-1519.
- 33. Zurniati, R., et al. (2024). AI tools for decision-making in educational management. Educational Technology Management Journal, 15(3), 125-137.