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EVALUATION OF THE USE OF ARTIFICIAL INTELLIGENCE IN RECRUITMENT PROCESSES IN PRIVATE EDUCATION

EVALUACIÓN DEL USO DE LA INTELIGENCIA ARTIFICIAL EN LOS PROCESOS DE SELECCIÓN DE PERSONAL EN LA EDUCACIÓN PRIVADA

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ABSTRACT

The digital transformation of private educational institutions has placed considerable emphasis on the need to modernize human talent management processes through artificial intelligence (AI), raising questions about the current implementation and operational functionality of the phenomenon under study. Therefore, this research aims to comprehensively evaluate the use of artificial intelligence in personnel selection in private educational institutions through the analysis criteria of implementation, operational functionality, and organizational determinants. The study employed a quantitative, non-experimental, cross-sectional, and descriptive method design. Consequently, the population consists of 51 professionals working in human talent management, and the sample was selected using a non-probabilistic convenience sampling method. Two validated questionnaires were developed: "Artificial Intelligence" (α = 0.969, consisting of five dimensions) and "Personnel Selection" (α = 0.976, consisting of three dimensions), analyzed using descriptive statistical analysis techniques and joint distribution tables, respectively. The results reveal critical differences in conceptual mastery, with only 17.6% of respondents demonstrating efficient mastery of AI and 47.1% demonstrating substantial deficiencies, and significant limitations in selection functionality, with 51% of participants considering selection to be "poor". Likewise, the analysis of organizational patterns resulted in three distinct profiles, proving the systematic interdependence between technology and operational functionality. Consequently, private educational institutions are clearly at an early stage of technology implementation, as there are critical gaps between theoretical potential and current readiness and, as a result, they need a holistic change approach that takes into account the specificities of the contemporary educational niche.

Keywords:

Artificial Intelligence, Recruitment, Private Education, Talent Management, Digital Transformation.

RESUMEN

La transformación digital de las instituciones educativas privadas ha incrementado la necesidad de modernizar los procesos de gestión del talento humano mediante el uso de la inteligencia artificial, lo que plantea interrogantes sobre su nivel real de implementación y funcionalidad operativa. En este contexto, la presente investigación tiene como objetivo evaluar de manera integral el uso de la inteligencia artificial en la selección de personal en instituciones educativas privadas, considerando criterios de implementación, funcionalidad operativa y determinantes organizacionales. El estudio se desarrolló bajo un enfoque cuantitativo, con un diseño no experimental, transversal y descriptivo, aplicándose a una población de 51 profesionales del área de gestión del talento humano, seleccionados mediante muestreo no probabilístico por conveniencia. Para la recolección de datos se utilizaron dos cuestionarios validados, "Inteligencia Artificial" (α = 0.969) y "Selección de Personal" (α = 0.976), analizados mediante estadística descriptiva y tablas de distribución conjunta. Los resultados evidencian diferencias críticas en el dominio conceptual de la inteligencia artificial, ya que solo el 17.6% de los participantes demuestra un manejo eficiente, mientras que el 47.1% presenta deficiencias sustanciales; asimismo, se identifican limitaciones significativas en la funcionalidad del proceso de selección, dado que el 51% de los encuestados lo califica como

deficiente. El análisis de los patrones organizacionales permitió identificar tres perfiles diferenciados, lo que confirma la interdependencia sistemática entre la tecnología y la funcionalidad operativa; en consecuencia, se concluye que las instituciones educativas privadas se encuentran en una etapa temprana de implementación tecnológica, con brechas relevantes entre el potencial teórico y el nivel de preparación actual, lo que hace necesario adoptar un enfoque de cambio holístico acorde con las particularidades del contexto educativo contemporáneo.

Palabras clave:

Inteligencia Artificial, Reclutamiento, Educación Privada, Gestión del Talento, Transformación Digital

INTRODUCTION

The current digital revolution has forced private educational institutions to modernize their administrative and human resource management systems through advanced technologies (Gkrimpizi et al., 2023). Within this context, artificial intelligence (AI) has emerged as a disruptive tool that enables the identification, evaluation, and selection of highly qualified candidates, enhancing the overall efficiency of human talent management (León-González & Pire-Rojas, 2025). Despite the growing adoption of AI-based recruitment systems, many traditional selection methods in private education remain inadequate in terms of diagnostic accuracy, operational efficiency, and predictive capability, creating inefficiencies in institutional processes.

The literature highlights several benefits of intelligent algorithms in recruitment, including improved selection accuracy, reduction of unconscious bias, and optimization of time and financial resources (Palos-Sánchez et al., 2022). However, there is a scarcity of empirical research on AI implementation in the private education sector, where recruitment decisions rely not only on quantitative metrics but also on complex assessments of pedagogical competencies, institutional values, and interpersonal skills. This gap means that administrators, even with private teaching experience, may lack the comprehensive HR expertise derived from organizational culture and teaching practices in specific socio-cultural contexts.

The rapid digital transformation of higher education, accelerated by the COVID-19 pandemic, has increased the use of diverse educational modalities and emerging technologies (Fernández et al., 2023). Recruitment in private institutions faces particular challenges, including evaluating specific teacher competencies, adaptability to institutional philosophies, and the ability to maintain professional and interpersonal relationships. These challenges underscore the need for AI algorithms capable of processing qualitative and multidimensional data to predict the performance of future teaching and administrative staff.

Given this context, evaluative research is necessary to characterize the extent of AI implementation in recruitment, assess its operational effectiveness, and identify the organizational factors that determine successful adoption. The central research question is: What is the current state of AI use in personnel recruitment in private educational institutions, and which factors influence its operational efficiency and organizational integration?

This study is relevant because it can inform decision-making on optimizing human talent management through AI, providing evidence-based insights for the adoption of intelligent recruitment systems. Methodologically, it contributes to the theoretical understanding of AI in HR management, addressing a gap in the current academic literature. The general objective is to comprehensively evaluate AI use in recruitment processes, considering implementation, operational effectiveness, and organizational determinants. Specific objectives include assessing the conceptual mastery of AI tools by recruitment personnel, examining selection process efficiency and transparency, and analyzing organizational factors that facilitate or hinder AI adoption in contemporary educational settings.

Technological development in private education has created an urgent need to modernize HR processes using advanced digital tools. Digitization has increased competitive pressures and demands for operational efficiency, especially in private institutions (Fernández et al., 2023). Education is no longer merely about adopting technology; it requires a profound reorganization of organizational processes to enhance educational services and administrative management. The COVID-19 pandemic accelerated these transformations, driving substantial changes in teaching methods and technology adoption (Jin et al., 2025).

Private educational institutions must reassess their governance and align recruitment processes with a rapidly evolving market that demands more complex talent assessments (Aditya et al., 2021). The incorporation of AI presents both opportunities and challenges, requiring institutional policies that address academic, technical, and ethical issues (Lachheb et al., 2025; Wang et al., 2024). Effective talent management can predict faculty performance, academic leadership, and contributions to learning environments, highlighting the importance of strategic HR approaches and leadership resonance in higher education (Ramaditya et al., 2022).

Competition for resources, faculty, research innovation, and reputation has made recruitment processes critical, necessitating competency frameworks that integrate

digital skills and technological adaptability alongside traditional competencies (Razali et al., 2024). Evidence shows that knowledge management, cultural intelligence, and transformational leadership influence organizational success, while resistance to change and organizational culture affect the adoption of new technologies in fast-paced digital environments.

AI in recruitment relies on predictive algorithms, machine learning, natural language processing, and cognitive automation to optimize hiring processes (Davis & Bagozzi, 1989; Mendy et al., 2024). Its application has grown exponentially, allowing the analysis of multimodal candidate information, enhancing diagnostic accuracy, and reducing bias (Nawaz et al., 2024; Palos-Sánchez et al., 2022). Emerging technologies, such as RAG systems, further improve real-time data processing for AI-based recruitment systems.

Despite its benefits, AI poses ethical risks, including algorithmic bias and opaque decision-making (An et al., 2024; Chávez et al., 2025; Jeon et al., 2025), which require multidisciplinary solutions combining technical, ethical, and legal approaches (Fenwick et al., 2024; Dima et al., 2024). Frameworks promoting beneficence, non-maleficence, autonomy, justice, and transparency are essential for responsible AI adoption in education (Fu & Weng, 2024; Khosravi et al., 2022).

Technology acceptance models, such as TAM and UTAUT, provide conceptual frameworks to understand AI adoption, identifying determinants like perceived usefulness, ease of use, performance expectation, effort expectation, social influence, and facilitating conditions (Davis & Bagozzi, 1989; Venkatesh et al., 2003). Recent studies emphasize AI-specific factors, including trust, anxiety, and ethics, as well as cultural moderators, showing that adoption is context-dependent and extends beyond technical considerations to maintaining human agency.

The Technology-Organization-Environment (TOE) framework complements these insights by integrating technological, organizational, and environmental factors, such as compatibility, complexity, relative advantage, institutional size, structure, resources, competition, regulations, and external support, all of which shape AI adoption in education. Organizational culture, fostering curiosity and innovation, is crucial for successful integration, and investment in skills development is essential to prepare institutions for the AI era.

Similarly, transformational leadership is crucial in facilitating organizational change, as it promotes a strategic and enabling orientation, empowers employees, and ensures the adaptive innovation necessary for disruptive technologies to be sustainable. Facilitating organizational capabilities for AI requires systematic approaches that implement capacity building, institutional policies, and management, and ensure responsible implementation.

Finally, another factor at the organizational level that can derail the implementation of AI in recruitment processes is resistance to change. According to Kravariti et al. (2021), "resistance to change manifests itself through the behavioral, cognitive, and affective attributes of employees, with a particular focus on the latter in the digital transformation process". Furthermore, in the process of introducing innovations in the field of education, resistance may increase due to the conservative nature of educational institutions and employees' concerns about the automation of roles that are traditionally considered inherent to humanity.

Recent research has identified specific approaches to mitigate resistance to change in the transition toward the adoption of educational AI, including training programs for specialized AI engineers, AI literacy development, and participatory approaches to system design and implementation. These approaches recognize that the successful adoption of AI in education depends not only on technical competence, but also on an understanding of the ethical, social, and pedagogical aspects of its applications in specific educational contexts.

Materials and methods

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The research design used in this study was quantitative, non-experimental, cross-sectional, and descriptive in scope. This type of design was justified by the exploratory nature of the phenomenon analyzed and the lack of a theoretical basis that would allow for the development of well-founded hypotheses, with the aim of characterizing the current state of the use of artificial intelligence in educational recruitment processes without experimental intervention. The positivist paradigm supports the research, which seeks an objective measurement of perceptions, knowledge, and practice of emerging technologies in human talent management, which supports systematic quantification through standardized instruments.
The target population was defined as professionals involved in human talent management in private educational institutions who participate directly in the recruitment, selection, and hiring of teaching and administrative staff. This definition was based on the level of specialization required to judge the appropriate use of advanced technologies in the educational field, as well as on the organizational autonomy present in private institutions, which allows for the adoption of technological innovations.
Without further ado, it is assumed that these professionals possess the experiential knowledge necessary to provide an informed perspective on the use of intelligent systems in practice. Given the inherent limitations of access to private educational organizations and the highly specialized nature of the target population, it was decided to resort to a non-probabilistic convenience sampling strategy.
While this methodological choice excludes the possibility of generalizing the findings in statistical terms, it is appropriate and justified for exploratory studies in emerging fields where access to specialized participants is considerably limited. Therefore, the present sample approach will provide valuable information from professionals with direct experience of the phenomenon due to the proportion of other insights that are exceptionally important for the initial understanding of the research problem.
In summary, the final sample consisted of fifty-one participants who met the strict selection criteria established previously. For exploratory descriptive studies focused on specialized and hard-to-reach populations, this sample size is very similar to other research on emerging technologies for higher education. However, it can be admitted that a larger sample size would have significantly improved the research findings and enabled more insightful statistical analyses. Therefore, it can be said that the present study should be considered as preliminary research that contributes significantly to the understanding of the phenomenon and to the possibility of conducting further research with larger samples and more sophisticated methodologies.
Regarding the selection criteria, the inclusion requirements were defined as follows: minimum of one year of experience in educational human talent management; active and documented participation in institutional recruitment processes in the last year; current employment relationship with private educational institutions; basic knowledge of digital technologies applied to human resources; and voluntary and informed consent to participate in the study. In contrast, the exclusion criteria consisted of personnel without direct participation in selection processes and exclusively administrative functions, temporary employees for up to six months, incomplete questionnaires (more than 10%), and professionals with less than six months of experience in the education sector. These criteria ensure the participation of professionals who are experts and knowledgeable about the context under study.
With regard to the independent variable, artificial intelligence was conceptualized as the multidimensional perception of professionals regarding conceptual mastery, practical application, and organizational factors associated with the implementation of intelligent systems in educational human talent management. The operationalization of the variable was structured into the following five dimensions: general knowledge about artificial intelligence, application of artificial intelligence in selection, perception of benefits, perception of ethical risks, and training and willingness to use. The dependent variable, personnel selection, was defined as the perception of the effectiveness of institutional processes for identifying, evaluating, and hiring suitable candidates. The oper-

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ationalization of the variable was structured around the following three dimensions: process efficiency, evaluation quality, and process transparency.

Two structured questionnaires were designed using five-point Likert scales. The first, for the artificial intelligence instrument, consists of thirty items distributed equally across five dimensions, equivalent to six items per dimension, with a theoretical range of thirty to one hundred and fifty points. The second instrument, for methodology, consists of twenty-seven items and is distributed equally among three dimensions, equivalent to nine per dimension, with a theoretical range of twenty-seven to one hundred and thirty-five. Content validity was verified using Aiken's V coefficient, which was applied by five experts with a high level of knowledge on the topics of human resource management, educational technology, and research, whose values were found to be above 0.80 in all items. A pilot study was conducted with fifteen participants with similar characteristics to verify comprehensibility and discrimination, resulting in slight adjustments to three items.

Reliability was established using Cronbach's alpha with the fifty-seven total items, reflecting excellent internal consistency: 0.979 in the artificial intelligence scenario and 0.976 in the case of personnel selection. The corrected item-total analysis revealed significant contributions with correlations ranging from 0.510 to 0.913, confirming the relevance of each item.

Data collection was carried out using a structured protocol that ensured the fulfillment of the evaluation objectives and appropriate ethical considerations. Formal contact was made with the participating institutions requesting institutional and explicit authorization, highlighting the strategic contributions of the study. Individual informed consent was used, which provided respondents with complete information about the objectives, procedures, use of data, and the right to withdraw. It was conducted in person at the facilities during agreed working hours, which allowed for clarification of technical concepts about artificial intelligence. The average duration was twenty-five minutes, with a trained researcher available throughout the period to answer any questions that arose without influencing their responses.

The processing, on the other hand, was carried out using IBM SPSS version 30, implementing descriptive statistical techniques structured in three phases according to the specific objectives. The first phase consisted of a comprehensive descriptive analysis to characterize the conceptual domain and practical application of artificial intelligence using measures of central tendency, dispersion, and frequency distributions to construct scales categorized into three levels: poor, fair, and efficient.

The second phase focused on examining the effectiveness of the selection processes, which involved conducting a descriptive analysis of the indicators of operational efficiency, evaluative quality, and procedural transparency, categorizing them as poor, fair, and good. The third phase directed the joint distribution analysis, using cross-tabulation tables to identify patterns of association and characterize organizational profiles. The assessment of normality assumptions, carried out using Kolmogorov-Smirnov and Shapiro-Wilk tests, confirmed a non-normal distribution, allowing the use of robust descriptive statistics and, in turn, maintaining consistency between the descriptive objectives set and the analysis techniques implemented.

This study is subject to intrinsic methodological limitations that must be addressed with caution when interpreting and generalizing the results obtained. First, the use of non-probability convenience sampling, while appropriate from a methodological standpoint for exploratory studies in specialized populations that are difficult to access, constitutes a significant limitation in terms of the statistical generalization of the findings to larger populations of professionals in the field of educational talent management. Given this limitation, the results should be considered preliminary evidence for the particular study context only. After all, such findings need to be confirmed by studies with random and probabilistic sampling designs.

Furthermore, although the sample size of 51 participants was sufficient to meet the exploratory descriptive objectives of the research, it is a substantial limitation for more sophisticated statistical analysis. However, it is clearly a more substantial limitation in terms of statistical power to differentiate or associate smaller differences or associations between the variables under study. As a result, the capabilities of the treatment tests to implement advanced analysis techniques are not limited to multivariate models and structural equation analysis. Therefore, in the future, research should use much larger samples for more robust statistical conclusions.

Furthermore, the cross-sectional design of the research implies some additional limitations, as it becomes impossible to establish causal relationships between variables and analyze temporal trends in the adoption of AI technologies in education systems. This limitation has critical consequences because, on the one hand, the implementation of AI in the hiring process is a dynamic and rapidly evolving process that can only be observed through the use of fads that can shape levels of knowledge, attitude, and organizational behavior over time. In this sense, the findings reflect only a simplified moment of realization of the phenomenon without allowing the direction of the observed relationships to be formulated.

Furthermore, the self-report instruments involved present their own biases when it comes to measuring attitudes, knowledge, and confidence levels. Among the potential methodological biases, social desirability bias is particularly relevant: participants may assess higher levels of knowledge or express favorable attitudes toward new technologies in order to project a competent professional image. As a result, the brief description given may exaggerate technological competence and underestimate organizational resistance. Taken together, these negative effects affect the reliability and validity of the measurements. Finally, the subjective features of the perceptions being measured cause measurement errors due to individual variability in them, which cannot fully reflect the objective reality of the organizational processes being evaluated.

Given that the research in question deals with the specific results of the participating private institutions, its transferability to public institutions, organizations with different sizes, levels, and complexity, and different geographical and cultural contexts would be highly restricted. Being context-specific, the conclusions imply that caution should be exercised when considering them applicable to other educational settings, requiring, at the very least, correlational studies in different institutional contexts to verify the relevance of the findings.

The rigor of this study was limited by its cross-sectional design and non-probability convenience sample, which affected the generalizability of the results and the cause-and-effect relationship. To mitigate the effect of these limitations from the outset, methodological mitigation strategies were implemented, namely rigorous validation of instruments through expert evaluation and a pilot study, in-person administration of the questionnaire to facilitate clarification of complicated technical terms, and statistical analysis. The findings are not overgeneralized and are interpreted with caution, without the authors assuming prior knowledge of the subject. However, the expected result does not eliminate the limitations, so the results are interpreted as valuable preliminary data that should be confirmed by further studies using a more robust design and a representative sample, as well as a longitudinal approach to measure the evolution of the phenomenon studied over time.

RESULTS AND DISCUSSION

The results provide comprehensive evidence based on penetration data for the use of artificial intelligence in the recruitment processes of private educational institutions and the lessons that can be learned from this use. In this regard, the analysis structure followed the three phases in line with the specific objectives established, and descriptive statistical techniques were used to characterize the conceptual domain, review operational effectiveness, and identify significant organizational patterns.

Confirmation of the normality assumptions using Kolmogorov-Smirnov and Shapiro-Wilk tests indicated a non-normal distribution of the data ($p < 0.05$). Therefore, the use of robust descriptive statistics was validated. The instruments exhibited excellent reliability, with Cronbach's alpha of 0.969 for artificial intelligence and 0.976 for personnel selection, exceeding the reference standards for social science research.

Specific Objective 1: Evaluation of conceptual mastery and practical application of artificial intelligence

The descriptive analysis focused on assessing the level of conceptual mastery and practical application of artificial intelligence tools in the context of professional-level competencies and skills revealed significant deficits among participants. In this regard, Table 1 illustrates that only 17.6 percent of participants exhibited efficient mastery of artificial intelligence, compared to 47.1 percent previously, confirming the existence and critical relevance of limitations and deficiencies in the technical knowledge and practical experience necessary for the effective implementation of intelligent systems.

Table 1: Assessment of conceptual mastery and practical application of artificial intelligence.

Dimension	Deficient n (%)	Regular n (%)	Efficient n (%)
General knowledge about AI	26 (51.0)	16 (31.4)	9 (17.6)
Application of AI in selection	24 (47.1)	13 (25.5)	14 (27.5)
Perception of benefits	26 (51.0)	12 (23.5)	13 (25.5)
Perception of ethical risks	20 (39.2)	17 (33.3)	14 (27.5)
Training and readiness	18 (35.3)	18 (35.3)	15 (29.4)
Variable Total AR	24 (47.1)	18 (35.3)	9 (17.6)

Note: n = 51 participants

The dimensional characterization revealed that general knowledge about artificial intelligence presented the greatest deficit, with 51.0% of participants at a deficient level. This value demonstrated that there is a fundamental disconnect between the theoretical potential documented in the specialized literature and the practical understanding of educational stakeholders. The perception of benefits showed an identical proportion of deficiency. Furthermore, the advantages documented in corporate contexts do not automatically translate to the education sector. The application of artificial intelligence in selection showed moderately superior results, with 27.5% at an efficient level. Finally, the perception of ethical risks showed greater relative awareness, with 27.5% at an efficient level, while training and willingness to use reached 29.4%. This reveals limited, albeit existing, organizational readiness for the adoption of specific technologies.

Specific Objective 2: Examination of the effectiveness of selection processes

Indicators related to operational efficiency, test quality, and procedural transparency show serious deficiencies in existing institutional procedures. According to Table 2, only 21.6% of participants consider the processes to be good, while the remaining 51.0% consider them to be poor, confirming the desperate need to optimize institutional recruitment procedures.

Table 2: Examination of the effectiveness of personnel selection processes.

Dimension	Bad n (%)	Regular n (%)	Good n (%)
Process efficiency	24 (47.1)	10 (19.6)	17 (33.3)
Quality of the evaluation	22 (43.1)	18 (35.3)	11 (21.6)
Transparency of the process	24 (47.1)	12 (23.5)	15 (29.4)
Variable Total selection	26 (51.0)	14 (27.5)	11 (21.6)

Note: n = 51 participants

The last process showed relatively less critical performance in terms of efficiency, as 33.3% of participants rated it as good, contrasting with 47.1% who described it as poor in relation to time and resource constraints. The evaluation had critical deficiencies in diagnostic accuracy, with only 21.6% considering the quality to be good and 43.1% rating it as poor, raising questions about the institutional capacity to install a robust selection process. The transparency of the process was also insufficiently clear, with 47.1% of participants rating it as poor compared to 29.4% who described it as good, raising some ethical concerns about accepted automated systems, where algorithmic applicability is a key requirement.

Specific Objective 3: Analysis of determining organizational factors

The analysis of determining organizational factors based on the use of joint distribution through cross tables makes it possible to discern patterns of association and verify whether and how the hypothesis of interdependence between artificial intelligence mastery and business process effectiveness is fulfilled. It also allows for the configuration of specific organizational profiles that facilitate or hinder the successful adoption of new technologies. Table 3 shows the joint distribution, which demonstrates that the adoption of failure is a systemic phenomenon.

Table 3: Joint distribution of artificial intelligence and personnel selection.

Artificial Intelligence	Personnel Selection			Total
	Bad n (%)	Regular n (%)	Good n (%)	n (%)
Deficient	24 (47.1)	0 (0.0)	0 (0.0)	24 (47.1)
Regular	2 (3.9)	14 (27.5)	2 (3.9)	18 (35.3)
Efficient	0 (0.0)	0 (0.0)	9 (17.6)	9 (17.6)
Total	26 (51.0)	14 (27.5)	11 (21.6)	51 (100.0)

Note: n = 51 participants

The results indicate that 47.1% of participants are in the simultaneous zone of poor artificial intelligence competence and poor processes, while only 17.6% encompass the efficient levels of artificial intelligence associated with good processes. Furthermore, the findings showed that there are no cases of poor artificial intelligence proficiency associated with fair or good processes, nor are participants with efficient proficiency linked to poor or fair processes. Therefore, there is a pattern of systematic association between technological competencies and operational effectiveness. Finally, the level of regular artificial intelligence competence showed a heterogeneous distribution with participants mainly

concentrated in regular processes, which are quantified at 27.5%, suggesting an intermediate zone in operations where the gradual development of technical competencies will result in progressive improvements.

This joint distribution also confirms that conceptual mastery of artificial intelligence is a determining organizational factor. More specifically, deficits in technical knowledge are consistently associated with ineffective selection processes, while an advanced technological organization chart is correlated with efficient procedures. The findings reveal three distinctive organizational profiles, with institutions characterized by simultaneous technological and operational deficits, organizations in transition with intermediate competencies, and technologically advanced institutions with optimized processes. Therefore, given that the institutions in the first two groups share several functional and knowledge limitations, it is concluded that the successful adoption of AI requires comprehensive organizational capabilities and capacities at its core and not simply high-tech implementations.

These results confirm the comprehensive fulfillment of the specific objectives set and provide empirical evidence of the current state of artificial intelligence use in private educational institutions; characterize critical deficits in conceptual domain and limited operational effectiveness with regard to the selection process; and identify organizational patterns that may condition or promote the successful adoption of intelligent technologies in modern educational contexts.

In summary, the findings reveal a fundamental paradox between the theoretical potential of artificial intelligence, as described in the specialized literature, and the empirical reality in private educational institutions.

The characterization of the conceptual domain showed that only 17.6% of professionals responsible for recruitment have efficient AI skills, while 47.1% lack them substantially, confirming the critical gaps between theoretical expectations and current organizational preparedness. This disconnect runs counter to expectations of accelerated post-pandemic adoption documented by Fernández et al. (2023) regarding the imbalance between pedagogical and managerial applications of AI, meaning that institutions have prioritized its application in academic processes over strategic administrative functions.

In relation to the dimensional assessment, high gaps and contrasting patterns further problematize simplistic adoption models that do not take into account specific differences in areas of application and relevant skills.

In particular, general knowledge about AI showed the largest deficit, with 51.0% of respondents not reaching level 3, which undoubtedly leads to a fundamental disconnect between the documented potential of the approach and the general practical understanding of educational stakeholders. It is significant that, in terms of the level of practical application of AI in selection, the degree of efficiency was higher than theoretical knowledge, with 27.5% versus 17.6%, respectively. This may suggest that professionals acquire operational skills through unsystematic empirical experience rather than through structured education. At the same time, this dynamic Davis' Technology Acceptance Model (1989), according to its principles, perceived usefulness must precede adoption to ensure long-term efficiency, which further problematizes the applicability of implementations based on informal learning.

Perceived benefits Palos-Sánchez et al. (2022) classify 51.0% of participants as deficient in their perception of benefits, indicating a critical disconnect between the advantages and the contextualized understanding of educational professionals. This gap suggests that the potential documented in corporate contexts does not automatically translate to the education sector. The multidimensional criteria encompassing embedded pedagogical competencies, institutional values, and relational skills call for specialized technological approaches that exceed the current capabilities of AI technology.

Conversely, the perception of ethical risks emphasizes greater awareness, with 27.5% at a deficient level. This differentiation suggests that educational institutions have been able to maintain higher ethical practices and standards, which could facilitate more responsible adoption. However, high standards of ethical responsibility can also constitute barriers to accelerated implementation. The distance between the technical and administrative missions of AI Wellbeing and buyers and sellers can create organizational tensions between technological innovation and social responsibility.

As a result of examining the effectiveness of selection processes, systemic challenges were identified that differ substantially from Ramaditya et al. (2022) on the predictive capacity of effective talent management systems. According to the characterization, only 21.6% of participants described the processes as good, while 51.0% described them as poor, confirming the imperative need for talent management. The quality of the evaluation itself suffers from critical deficits, as only 21.6% of participants described it as good and 43.1% rated it as poor. Such findings challenge theoretical assumptions about the inherent capabilities of educational institutions to create rigid processes; however, Razali et al. (2024) emphasize their critical importance for competitive positioning in increasingly saturated educational markets.

Deficits in procedural transparency, rated as poor by 47.1% of participants, introduce ethical considerations that resonate with Dima et al. (2024), is warning about the need for more humane technologies; therefore, considerations about algorithm explainability create additional parameters in algorithm-based systems, as the demand for clarity and understandability intensifies.

The approach adopted by analyzing organizational patterns through joint distribution revealed systematic associations that verify the hypothesis of interdependence between technological competencies and operational effectiveness in all cases studied. Thus, 47.1% of participants were simultaneously at levels of artificial intelligence deficiency and poor selection processes, while only 17.6% showed higher levels of effectiveness associated solely with good processes. Such a polarized distribution in the adoption of artificial intelligence supports the assertion that its successful implementation is an extremely rare systemic phenomenon that cannot be achieved without the comprehensive alignment of technical competencies with organizational processes and institutional culture, rather than isolated technological implementations. Furthermore, the complete absence of poor artificial intelligence mastery associated with effective processes and the absence of any participants among those with advanced mastery who address poor processes clearly supports the assertion that technical knowledge in the area of interest is an absolute prerequisite for operational optimization. Therefore, the measurement results confirm the key positions of the Technology-Organization-Environment model regarding organizational aspects as critical factors determining the success of technology adoption.

Subsequent results found that the organizational profiles of the contemporary private education ecosystem can be divided into three distinct categories. In particular, institutions with deficits in both technological and operational competencies, accounting for 47.1% of the sample, highlight the inadequate preparation of organizations for digital transformation. Organizations in the middle, characterized by average deficits, accounting for 35.3% of the sample, demonstrate an intermediate zone in which the progressive development of technical skills can lead to progressive operational improvements, supporting phased implementation strategies. Finally, highly technological institutions with optimized processes, found in only 17.6% of cases, are exceptions and represent positive examples of adoption, for which a more detailed analysis can be carried out to identify replicable enabling factors.

Resistance to change, as identified by Kravariti et al. (2021), is particularly complex in educational settings, which are characterized by general institutional conservatism while expressing specific concerns about the replacement of some functions considered inherently human by automation. In this regard, resistance is part of the deep tensions between organizational modernization and the preservation of core educational values, and change management in these scenarios requires recognition of the sector's unique identity dimensions. The detection of poor organizational preparedness in terms of training and readiness for use, with only 29.4% competence, calls into question traditional approaches to skills development that relate solely to technology.

The findings presented in this study point to various theoretical implications, beyond testing existing models, suggesting the need for specialized conceptual frameworks that recognize the peculiarities of cyber education. This is due to a context in which technological innovation, ethical responsibility, and academic excellence converge in the face of complex organizational dynamics. In other words, these dynamics are different from those found in common business environments. From the perspective of overall results, it is confirmed that private educational institutions are in the early stages of the technology adoption cycle. Furthermore, these stages are characterized by a critical lack of organizational readiness.

Therefore, the likelihood of sustainable gains through individual synergistic implementation gains appears low. Consequently, holistic engagement strategies that simultaneously address technical, organizational, and cultural elements are critical to facilitating sustainable implementations of HR AI system deployments. However, these strategies must also be consistent with the fundamental educational missions and high ethical standards that characterize the education sector in the 21st century.

CONCLUSIONS

Overall, according to the comprehensive assessment, the use of artificial intelligence in the recruitment processes of private educational institutions has a critical gap between the potential of emerging technology and current organizational readiness. Therefore, the sector is in an early stage of adoption, showing substantial deficits in technical skills and operational processes. In terms of conceptual domain characterization and practical application, professionals responsible for human talent management do not have significant general knowledge of the phenomenon of artificial intelligence and the perception of its benefits. At the same time, they develop fragmented operational skills through unsystematic empirical experience, which contradicts the logic of traditional theoretical models of technology adoption, which posited perceived usefulness as a prerequisite for effective implementation.

The efficiency analysis that has been completed for selection operations has shown that there are systemic gaps in

operational efficiency, evaluative quality, and procedural transparency, suggesting that current institutional capacities cannot guarantee the effective application of modern technologies and methods in this field. In addition, the transparency deficit raised ethical concerns in terms of procurement, highlighting the need for specialized regulations in education.

The analysis of the triggering organizational factors reveals the diversity of the three institutional profiles linked by the systematic interdependence of technological competencies and operational effectiveness. Cases of polarization of alignment present exceptions: only cases of full alignment between technical knowledge, organizational processes, and culture within the institution covered by full original federal support were successful in enlightened adoption. The sustainable implementation of artificial intelligence in educational contexts is not ideally possible through a single technological solution developed through cybersecurity and commercial or educational marketing strategies. It is necessary to become sensitive to the various digital transformation strategies that encompass an entire educational system, some of which are ethically unethical even for corporate analysis.

REFERENCIAS BIBLIOGRÁFICAS

An, Q., Yang, J., Xu, X., Zhang, Y., & Zhang, H. (2024). Decoding AI ethics from Users' lens in education: A systematic review. ***Heliyon***, ***10***(20), e39357. https://doi.org/10.1016/j.heliyon.2024.e39357

Chávez-Cárdenas, M. d. C., Fernández-Marín, M. Á., & Lamí-Rodríguez del Rey, L. E. (2025). ***Web educativa e inteligencia artificial: Transformando el aprendizaje contemporáneo.*** Sophia Editions.

Davis, F. D., & Bagozzi, R. P. (1989). User acceptance of computer technology: A comparison of two theoretical models. ***Management Science***, ***35***(8), 982-1003. https://doi.org/10.1287/mnsc.35.8.982

Dima, A. L., Gilbert, M. H., Dextras-Gauthier, J., & Giraud, L. (2024). The effects of artificial intelligence on human resource activities and the roles of the human resource triad: Opportunities and challenges. ***Frontiers in Psychology***, ***15***, 1360401. https://doi.org/10.3389/fpsyg.2024.1360401

Fenwick, A., Molnar, G., & Frangos, P. (2024). Revisiting the role of HR in the age of AI: Bringing humans and machines closer together in the workplace. ***Frontiers in Artificial Intelligence***, ***6***, 1272823. https://doi.org/10.3389/frai.2023.1272823

Fernández, A., Gómez, B., Binjaku, K., & Meçe, E. K. (2023). Digital transformation initiatives in higher education institutions: A multivocal literature review. ***Education and Information Technologies***, ***28***(10), 12351-12382. https://doi.org/10.1007/s10639-022-11544-0

Fu, Y. & Weng, Z. (2024). Navigating the ethical terrain of AI in education: A systematic review on framing responsible human-centered AI practices. ***Computers and Education: Artificial Intelligence***, ***7***, 100306. https://doi.org/10.1016/j.caeai.2024.100306

Gkrimpizi, T., Peristeras, V., & Magnisalis, I. (2023). Classification of barriers to digital transformation in higher education institutions: Systematic literature review. ***Education Sciences***, ***13***(7), 746. https://doi.org/10.3390/educsci13070746

Jeon, J., Kim, L., & Park, J. (2025). The ethics of generative AI in social science research: A qualitative approach for institutionally grounded AI research ethics. ***Technology in Society***, ***81***, 102836. https://doi.org/10.1016/j.techsoc.2025.102836

Jin, Y., Yan, L., Echeverria, V., Gašević, D., & Martinez-Maldonado, R. (2025). Generative AI in higher education: A global perspective of institutional adoption policies and guidelines. ***Computers and Education: Artificial Intelligence***, ***8***, 100348. https://doi.org/10.1016/j.caeai.2024.100348

Khosravi, H., Buckingham Shum, S., Chen, G., Conati, C., Tsai, Y.-S., Kay, J., Knight, S., Martinez-Maldonado, R., Sadiq, S., & Gašević, D. (2022). Explainable Artificial Intelligence in education. ***Computers and Education: Artificial Intelligence***, ***3***, 100074. https://doi.org/10.1016/j.caeai.2022.100074

Kravariti, F., Oruh, E. S., Dibia, C., Tasoulis, K., Scullion, H., & Mamman, A. (2021). Weathering the storm: Talent management in internationally oriented Greek small and medium-sized enterprises. ***Journal of Organizational Effectiveness: People and Performance***, ***8***(4), 444-463. https://doi.org/10.1108/JOEPP-01-2021-0022

Lachheb, A., Leung, J., Abramenka-Lachheb, V., & Sankaranarayanan, R. (2025). AI in higher education: A bibliometric analysis, synthesis, and a critique of research. ***The Internet and Higher Education***, 101021. https://doi.org/10.1016/j.iheduc.2025.101021

León-González, J. L. y Pire-Rojas, A. (Comp). (2025). ***Investigación, neurociencia e inteligencia artificial: Hacia una formación universitaria integral***. Sophia Editions.

Mendy, J., Jain, A., & Thomas, A. (2024). Artificial intelligence in the workplace – challenges, opportunities and HRM framework: A critical review and research agenda for change. ***Journal of Managerial Psychology***, ***39***(8), 1245-1267. https://doi.org/10.1108/JMP-05-2024-0388

Nawaz, N., Arunachalam, H., Pathi, B. K., & Gajenderan, V. (2024). The adoption of artificial intelligence in human resources management practices. ***International Journal of Information Management Data Insights***, ***4***(1), 100208. https://doi.org/10.1016/j.jjimei.2023.100208

Palos-Sánchez, P. R., Saura, J. R., Reyes-Menendez, A., & Esquivel, J. C. (2022). Artificial intelligence and human resources management: A bibliometric analysis. ***Applied Artificial Intelligence***, ***36***(1), 2145631. https://doi.org/10.1080/08839514.2022.2145631

Ramaditya, M., Maarif, M. S., Affandi, J., & Sukmawati, A. (2022). Reinventing talent management: How to maximize performance in higher education. ***Frontiers in Education***, ***7***, 929697. https://doi.org/10.3389/feduc.2022.929697

Razali, R., Muhammad, A., Arifin, L. A., Shafie, F., Lina, A., Azlan, M., Ashari, H., & Ibrahim, F. (2024). Mapping the landscape of talent management research in higher education: A bibliometric analysis. ***Cogent Business & Management***, ***11***(1), 2298300. https://doi.org/10.1080/23311975.2023.2298300

Venkatesh, 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

Wang, H., Dang, A., Wu, Z., & Mac, S. (2024). Generative AI in higher education: Seeing ChatGPT through universities' policies, resources, and guidelines. ***Computers and Education: Artificial Intelligence***, ***7***, 100326. https://doi.org/10.1016/j.caeai.2024.100326