Inteligencia Artificial Como Impulsor De La Gestión Del Conocimiento Y La Eficiencia Académica: Un Estudio Descriptivo En Estudiantes Universitarios Peruanos

Emma Isabel Costa Balarezo
Professor, Department of Industrial Engineering, Universidad Privada Antenor Orrego, Trujillo, Peru.
Jorge Nicolás Chávez Costa
Law Student, Faculty of Law, Universidad de Piura, Peru.

ABSTRACT. The rapid emergence of generative Artificial Intelligence (AI) has transformed academic practices, particularly in higher education, where tools such as ChatGPT, Copilot, and Gemini are increasingly used to support learning and decision-making. This study examines the influence of AI on the academic practices of industrial engineering students in Peru, with emphasis on its role in knowledge management and efficiency. A descriptive-analytical design was employed, using a structured questionnaire with Likert-scale items applied to a sample of undergraduate students. The instrument measured AI adoption, contributions to the knowledge management cycle (creation, storage, sharing, application), perceived impact on decision-making quality and time management, as well as levels of digital literacy and ethical awareness.

The findings reveal that nearly 60% of students reported frequent use of AI in their academic activities, particularly for generating ideas and applying knowledge in problem-solving. Strong contributions were observed in knowledge creation and application, while knowledge storage and sharing reflected more mixed perceptions. Most students identified efficiency gains and improved decision-making, supported by high levels of digital literacy and ethical awareness. These results suggest that AI is becoming a valuable complement to academic practices, though challenges remain regarding uneven adoption and overreliance. The study concludes with actionable recommendations for higher education institutions: to integrate formal AI literacy modules and faculty mentoring programs that foster critical, ethical, and reflective use of AI tools across the knowledge management cycle, promoting sustainable and responsible innovation in higher education.

Keywords: Artificial Intelligence, Knowledge Management, Efficiency, Higher Education, Industrial Engineering.

INTRODUCTION

The rise of generative Artificial Intelligence (AI) has profoundly reshaped knowledge processes in higher education. Tools such as ChatGPT, Copilot, and Gemini are increasingly used by students to generate ideas, structure assignments, and streamline decision-making. Beyond efficiency, these technologies influence the broader knowledge management cycle—knowledge creation, storage, sharing, and application—supporting students in their academic and professional development. However, the adoption of AI also raises concerns related to ethics, academic integrity, and digital literacy.

The recent research speaks to interesting opportunities and challenges. Barreto & Abarca (2025) found that the application of the SECI knowledge management model in conjunction with ChatGPT strengthens knowledge creation and knowledge sharing in higher education. Kim et al. (2025) suggested that AI supports the accuracy and efficiency of structured reports, demonstrating potential implications for decision-making in academics. Likewise, Asizbaev et al. (2025) indicated that management information systems, powered by artificial intelligence, can facilitate digital transformation through the enhanced flow of knowledge within organizations. In addition, bibliometric analyses including Choudhury & Routray (2024), indicate a growth of new research into knowledge management with AI, demonstrating the growing interest in this area worldwide.

Institutional efforts further exemplify AI's transformative role. For example, Chen et al. (2024), presented the Athena Project, which will utilize

AIcombined with edge computing to facilitate collaborative data-driven decision making. Other research, such as Tsoi & Strønen (2024), suggests that conversational AI, especially in online classrooms, can enhance student engagement and peer knowledge sharing. But with these benefits, there are several challenges, such as learning about ethical considerations, over-dependence on AI technologies in teaching and learning, and critical appraisal of outputs.

The number of empirical studies on AI in education in Latin America, especially in Peru, is insufficient to provide universities with a robust foundation to shape policies and pedagogical approaches. We sought to address this gap by examining how students studying industrial engineering perceive and use AI tools to assist their learning process. This research addresses the importance of understanding how AI affects knowledge management, efficiency and decision making. We also consider the potentially moderating factors of digital literacy and ethical responsability.

RESEARCH PROBLEM

The rapid growth of generative Artificial Intelligence (AI) tools, such as ChatGPT, Copilot, and Gemini, has introduced new opportunities and challenges in higher education. While these tools can enhance knowledge management by supporting processes of idea generation, information organization, knowledge sharing, and application, their actual influence on students' academic practices remains underexplored in many contexts. In Peru, and particularly within industrial engineering programs, there is limited empirical evidence on how students are integrating AI into their studies, to what extent it improves decision-making and efficiency, and how ethical concerns and digital literacy shape its responsible use.

This gap in understanding presents an urgent problem for universities, which are faced with an increasing presence of AI in educational spaces without adequate data on how to develop effective policies, teaching practices, and guidance for responsible implementation. Without such evidence, students may either underutilize AI's potential or adopt it in ways that compromise academic integrity. Therefore, the research problem centers on the need to examine how industrial engineering students perceive and apply AI tools in their academic activities, and what implications this has for knowledge management, efficiency, and ethical practice.

RESEARCH SIGNIFICANCE

This study is significant as it contributes to the growing body of knowledge on the role of generative Artificial Intelligence (AI) in higher education, with a particular focus on industrial engineering students. While global literature has documented AI's potential to enhance efficiency, knowledge management, and decision-making, there is a notable scarcity of empirical evidence from Latin American contexts, and especially from Peru. By examining how students perceive and utilize AI tools in their academic activities, this research fills an important gap and provides localized insights into the opportunities and challenges of integrating AI into learning environments.

On a theoretical level, the study extends discussions of knowledge management models by analyzing how generative AI supports the phases of knowledge creation, storage, sharing, and application within academic settings. On a practical level, the findings offer guidance to educators and institutions seeking to integrate AI into teaching and learning processes, ensuring that its adoption is accompanied by ethical awareness and digital literacy. Finally, on a policy level, the study highlights the need for universities to establish clear frameworks and guidelines for responsible AI use, fostering innovation while safeguarding academic integrity.

RESEARCH QUESTIONS

In line with the rapid digital transformation shaping higher education, this study seeks to explore the role of Artificial Intelligence (AI) in supporting students' academic knowledge management and decision-making processes. Building upon existing literature that highlights AI's potential to enhance efficiency, creativity, and collaboration, the present research focuses on how university students in Peru perceive and utilize AI tools in their daily academic practices. To guide the analysis, a set of research questions was developed to examine the frequency of AI use, its contribution to different stages of the knowledge management cycle, its impact on efficiency and decision-making quality, as well as the moderating role of digital literacy and ethical awareness.

- RQ1: To what extent do university students frequently use AI tools (e.g., ChatGPT, Copilot, Gemini) to support their academic activities?

- RQ2: How do AI tools contribute to the phases of the knowledge management cycle in academic contexts (knowledge creation, storage, sharing, and application)?

- RQ3: What is the perceived impact of AI on academic efficiency, specifically in improving decision-making quality and saving time?

- RQ4: What role do digital literacy and ethical awareness play in the effective and responsible use of AI in academic environments?

- RQ5: What challenges and opportunities arise from integrating AI into academic knowledge management and decision-making processes?

RESEARCH OBJECTIVES

The primary objective of this study is to analyze the influence of Artificial Intelligence (AI) on the academic practices of industrial engineering students, with a particular focus on its role in knowledge management and decision-making. With this purpose in mind, the research intends to assess how often and to what degree students use AI tools in their learning process, whether and how AI adds value in the cycle of the management of knowledge (i.e. creation, storage, sharing and application), and explore whether AI has an impact on educational efficiency in terms of quality of decisions made and time taken to make the decisions. This investigation will also look at whether and how digital literacy and ethical awareness can help contribute to the responsible and effective use of AI, and make recommendations for a justification of the strategic use of AI in academic practices to enhance learning and knowledge management practices.

METHODOLOGY

This study adopts a descriptive-analytical research design to investigate the influence of Artificial Intelligence (AI) on the academic practices of industrial engineering students, particularly regarding knowledge management and decision-making. The research population constitutes undergraduate students enrolled in an industrial engineering program, with data collected through a structured questionnaire utilizing a modified 5-Point Likert scale.

The instrument contained items that evaluated the frequency of AI usage, the extent to which AI supported the knowledge management cycle (creation, storage, sharing and use), the usage of AI and its activity to effects on academic efficiencies, the use of AI and its impact on academic decision making, digital literacies and ethical understandings. The sampling was purposive in order to promote a variability of representation of students that intentionally integrated AI tools into their academic work.

The data were analyzed descriptively to identify patterns and trends across the variables, providing an overview of how students perceive and apply AI in their academic activities. As the questionnaire contained only closed-ended items, the analysis was limited to quantitative data. However, future research could incorporate qualitative methods—such as interviews or open-ended

surveys—to explore students' perspectives in greater depth and complement the quantitative findings.

DATA COLLECTION INSTRUMENT

A structured questionnaire served as the main data collection instrument for this research study, and it was specifically designed to collect student perspectives of Artificial Intelligence (AI) in academic settings. The questionnaire was based on the previous research on knowledge management and AI adoption in higher education and was modified to accommodate the academic context of industrial engineering students. It was composed of ten items that were rated using a five-point Likert scale from "Strongly Disagree" (1) to "Strongly Agree" (5). The items were clustered into the corresponding key dimensions: AI usage frequency, support for the knowledge management cycle (i.e., creation, storage, sharing, and application), academic effectiveness and decision-making, digital literacy, and ethical awareness. This structure ensured that the instrument addressed both the functional benefits and the challenges associated with AI use in education. The questionnaire collected exclusively numerical data through closed-ended items, allowing for a clear and quantifiable analysis of students' perceptions. Future studies may include open-ended or interview-based questions to obtain richer qualitative insights that complement the quantitative findings.

STUDY POPULATION AND SAMPLE

The study sample comprised undergraduate students in industrial engineering at a private university in Peru. This study sample was chosen because they were directly engaged with technological tools, and familiarity with AI in academia and workplaces was growing. Purposive sampling was used to select students that used AI tools in productive and active learning activities. The final sample consisted of a list of those who responded to the structured questionnaire while ensuring there were students from each academic level and level of digital fluency. This approach allowed the study to capture a diverse set of perspectives while maintaining relevance to the research objectives. By focusing on industrial engineering students, the sample reflects a population where decision-making, efficiency, and knowledge management are critical academic skills, thereby providing valuable insights into how AI influences educational practices in a discipline closely tied to innovation and productivity.

DELIMITATIONS OF THE STUDY

This research was bounded in a number of ways to ensure clarity of scope and feasibility. In terms of topic, the research was limited to examining the role of Artificial Intelligence (AI) in academia, specifically regarding knowledge

management or decision-making. The study did not examine broader topics concerning AI benefits, technical advances, industrial applications, and policy implications. From the perspective of population, the research studied only undergraduate industrial engineering students at one private university in Peru. As a result, the findings in the research represent this demographic group, and may not be directly extrapolated to other students in other academic groups. Geographically, the study was conducted within the Peruvian higher education context, acknowledging that cultural, institutional, and technological conditions may differ in other regions. Methodologically, the use of a structured questionnaire constrained the data to self-reported perceptions, which may not fully capture behavioral practices. These delimitations help define the study's focus and guide the interpretation of its findings.

COMPILATION AND COMMENTARY ON PREVIOUS STUDIES

Recent studies underscore the growing intersection between Artificial Intelligence (AI) and knowledge management in academic and organizational contexts. Barreto & Abarca (2025) integrated the SECI model with ChatGPT in higher education, demonstrating that conversational AI enhances the processes of knowledge creation, externalization, and application. Their findings highlight that AI can foster deeper collaboration and innovation in learning environments. Similarly, Kim et al. (2025) illustrated how AI-powered systems streamline information-intensive tasks such as structured report generation, thereby improving decision-making efficiency and reducing errors in complex fields like pathology.

From a managerial perspective, Asizbaev et al. (2025) emphasized the role of AI-driven management information systems in facilitating digital transformation. Their study concluded that AI supports strategic knowledge flows, enabling organizations to align operations with innovation goals. Complementing this, Choudhury & Routray (2024) conducted a bibliometric review that mapped knowledge management trends from 2000 to 2023, revealing an increasing integration of AI tools to support organizational learning and evidence-based decisions. These insights affirm the global momentum of AI as a driver of knowledge systems.

Institutional initiatives also show promise. Chen et al. (2024) described the Athena NSF AI Institute, focusing on edge computing to advance data-driven collaboration and decision-making. Their work exemplifies how large-scale academic projects harness AI to build robust knowledge infrastructures. In parallel, Zhang et al. (2024) explored neuroimaging research trends, evidencing how AI transforms data management in highly technical domains.

While not directly linked to education, this work illustrates AI's versatility in processing and interpreting complex knowledge structures.

At the educational practice level, Tsoi & Strønen (2024) studied the integration of conversational AI for student engagement, highlighting its potential to support knowledge sharing and adaptive learning. Aghaee (2024) reinforced this view, showing that digital tools improve information management and student collaboration, key dimensions of the knowledge management cycle. Furthermore, Koonce et al. (2024) demonstrated how natural language processing can be leveraged in medical informatics to extract meaningful insights from large datasets, improving both decision-making quality and efficiency. Finally, Zou & Chen (2023) discussed the policy dimension, analyzing China's new vocational education law and its implications for AI adoption in training systems, signaling how regulatory frameworks influence AI's integration into educational knowledge ecosystems.

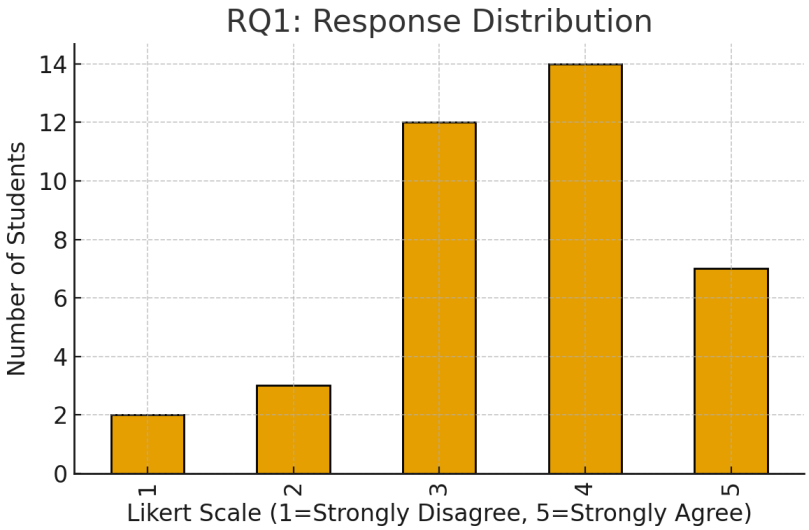
Taken together, these studies reveal that AI contributes significantly to enhancing knowledge creation, organization, sharing, and application across different sectors. However, they also underscore the necessity of digital literacy, ethical safeguards, and contextual adaptation to ensure that AI serves as a complement to, rather than a replacement for, human judgment.

RESULTS AND DISCUSSION

RQ1: To what extent do university students frequently use AI tools (e.g., ChatGPT, Copilot, Gemini) to support their academic activities?

The survey results indicate that while many industrial engineering students report some level of engagement with AI tools, usage frequency is uneven. A portion of students adopt AI regularly for assignments, explanations, and problem-solving, but others remain neutral or skeptical about its benefits. This finding reflects global trends: AI adoption among students is increasing but varies by familiarity, accessibility, and perceived utility (Barreto & Abarca, 2025). Thus, although AI is present in academic routines, it has not yet reached universal acceptance or systematic use across the student body.

Figure (1) Bar chart showing how often students use AI tools for academic work

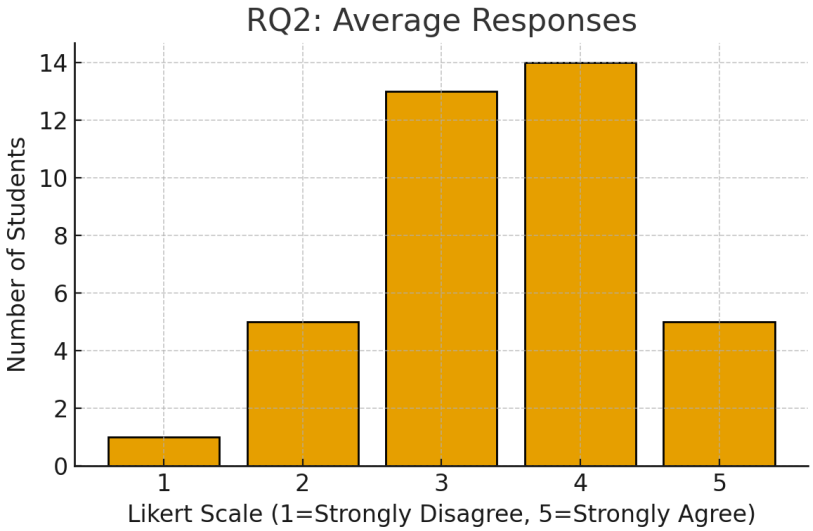


The results for RQ1 indicate that the majority of industrial engineering students make frequent use of AI tools to support their academic activities. Specifically, 14 students (40%) reported that they "Agree" with using AI regularly, while 7 students (20%) indicated "Strongly Agree," representing a combined total of nearly 60% who acknowledge consistent adoption. A further 12 students (34.3%) selected "Neutral," suggesting occasional or situational use, whereas only 3 students (8.6%) disagreed and 2 students (5.7%) strongly disagreed with the statement. These findings reveal that while most students are actively incorporating AI tools into their academic practices, a considerable proportion remains either undecided or reluctant, reflecting a transitional stage in the integration of AI within higher education learning routines.

RQ2: How do AI tools contribute to the phases of the knowledge management cycle in academic contexts (knowledge creation, storage, sharing, and application)?

AI tools were perceived as highly supportive across the knowledge management (KM) cycle. In knowledge creation, students reported using AI for generating new ideas and clarifying complex concepts, echoing findings that conversational AI fosters externalization and innovation in learning (Barreto & Abarca, 2025). For storage, AI facilitated the organization of notes and references, aligning with studies on AI-driven management information systems (Asizbaev et al., 2025). In terms of sharing, students acknowledged AI's role in enabling collaboration and discussion through digital platforms, consistent with Aghaee (2024). Finally, regarding application, respondents confirmed that AI assists in solving academic problems and applying knowledge effectively, reinforcing the view that AI enhances the practical use of information in decision-making contexts (Tsoi & Strønen, 2024).

Figure (2) Histogram of average responses across the knowledge management cycle (creation, storage, sharing, application)



The results show that AI tools are widely perceived as supportive across the four phases of the knowledge management cycle. For knowledge creation, 20 students (57.1%) agreed and 11 (31.4%) strongly agreed that AI helps generate new ideas, while only 2 students (5.7%) disagreed or strongly disagreed. In the case of knowledge storage, 17 students (48.6%) agreed and 5 (14.3%) strongly agreed, with 10 (28.6%) remaining neutral and 6 (17.1%) expressing disagreement. For knowledge sharing, 15 students (42.9%) agreed and 6 (17.1%) strongly agreed, but 6 students (17.1%) reported disagreement, and 11 (31.4%) were neutral. Finally, in knowledge application, 19 students (54.3%) agreed and 7 (20%) strongly agreed that AI helps them apply information to solve academic tasks, while only 4 (11.4%) disagreed or strongly disagreed.

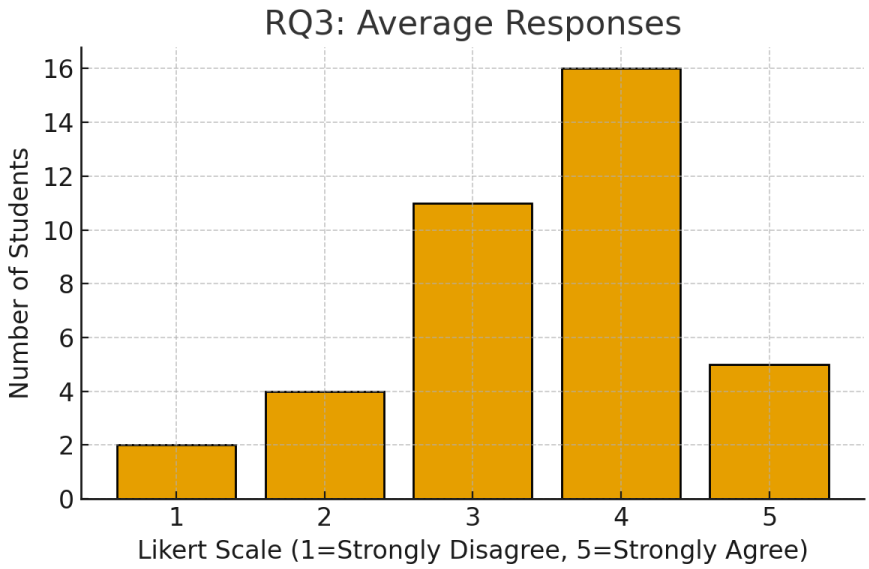
Overall, these findings indicate that the strongest contributions of AI tools are in knowledge creation and application, while storage and sharing show slightly more mixed perceptions, reflecting opportunities for improving integration in collaborative and organizational practices.

RQ3: What is the perceived impact of AI on academic efficiency, specifically in improving decision-making quality and saving time?

Students generally expressed that AI supports efficiency by reducing the time required to complete tasks and by enhancing the accuracy of their academic decisions. This aligns with Kim et al. (2025), who found that AI streamlines structured decision-making processes in technical fields. The perceived benefits include faster access to information, improved clarity when structuring assignments, and greater confidence in the validity of academic

choices. However, while efficiency gains are recognized, there remains variability in how consistently students integrate AI into their workflows.

Figure (3) Histogram summarizing perceptions of efficiency and decision-making improvements



The responses suggest that students recognize clear benefits of AI in improving both decision-making and efficiency. Regarding decision-making quality, 18 students (51.4%) agreed and 7 students (20%) strongly agreed that AI enhances the selection of information and structuring of academic work. Meanwhile, 9 students (25.7%) were neutral, and only 4 students (11.4%) expressed disagreement or strong disagreement. For efficiency and time-saving, 17 students (48.6%) agreed and 7 students (20%) strongly agreed that AI helps them complete academic tasks more efficiently, while 8 students (22.9%) remained neutral, and 6 students (17.1%) disagreed or strongly disagreed.

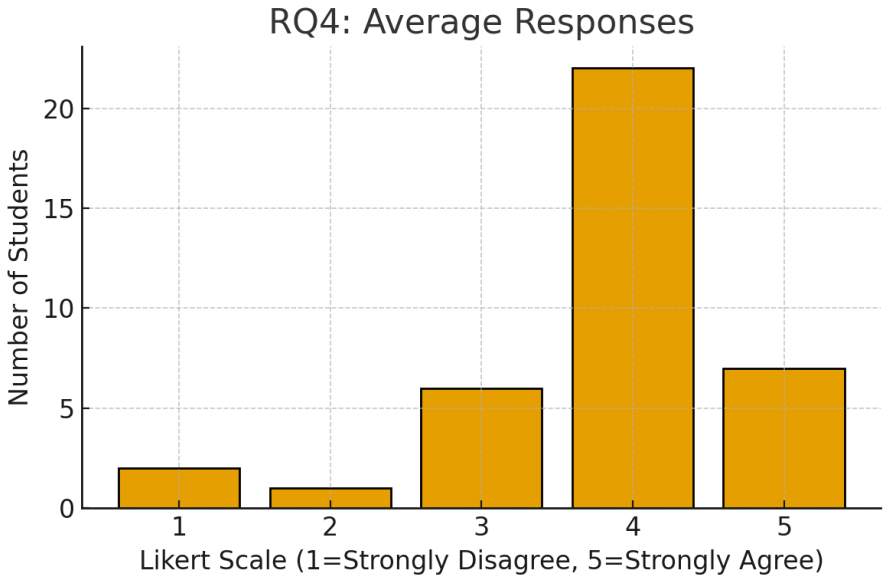
In total, nearly 70% of students perceive AI as a valuable tool for improving both decision-making quality and efficiency, although a small group remains unconvinced, reflecting the need for further training and integration in academic practices.

RQ4: What role do digital literacy and ethical awareness play in the effective and responsible use of AI in academic environments?

The findings highlight that digital literacy and ethical awareness act as moderating factors in AI adoption. Students with stronger digital skills reported higher effectiveness in integrating AI into academic activities. At the same time, ethical considerations—such as plagiarism, bias, and misinformation—were acknowledged as crucial concerns. This supports Butt (2023) and Choudhury & Routray (2024), who emphasized the necessity of

ethical frameworks to ensure responsible AI use. In essence, without digital readiness and ethical guidelines, the positive impact of AI may be diminished or misapplied.

Figure (4) Histogram of average responses regarding digital literacy and ethical awareness



The findings reveal that most students feel adequately prepared in terms of digital skills and ethical awareness. For digital literacy, 21 students (60%) agreed and 8 students (22.9%) strongly agreed that they possess the necessary skills to use AI tools effectively. However, 5 students (14.3%) remained neutral, and a small group of 4 students (11.4%) expressed disagreement or strong disagreement. Regarding ethical awareness, 18 students (51.4%) agreed and 15 students (42.9%) strongly agreed that they are conscious of plagiarism, bias, and misinformation risks when using AI, while only 3 students (8.6%) disagreed or strongly disagreed, and 2 students (5.7%) were neutral.

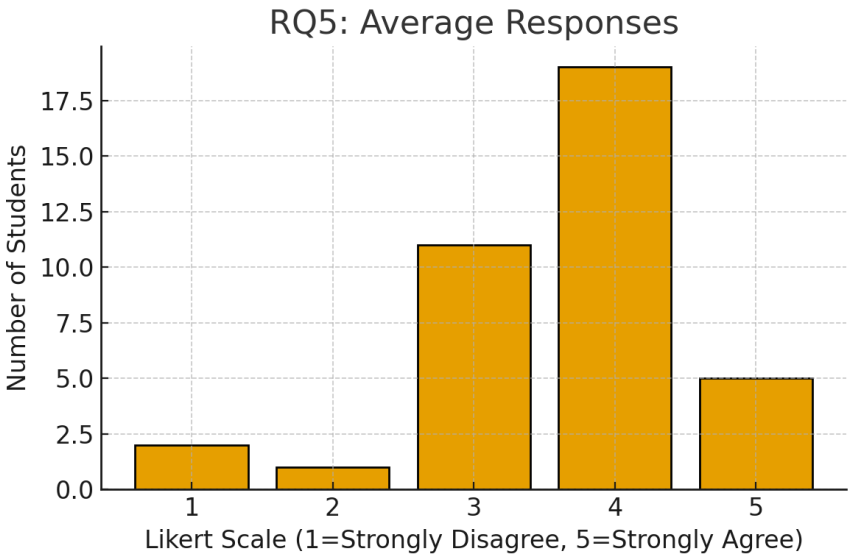
Overall, more than 80% of students perceive themselves as both digitally capable and ethically responsible when using AI, suggesting that literacy and awareness are strong enablers for effective and responsible adoption of these tools in academic settings.

RQ5: What challenges and opportunities arise from integrating AI into academic knowledge management and decision-making processes?

The main challenges identified include uneven technical knowledge, limited training opportunities, and concerns about overreliance on AI. These barriers mirror global observations that institutional readiness is key to successful AI integration (Chen et al., 2024). On the other hand, opportunities are substantial: AI can enhance knowledge sharing, optimize resource use, and

create new spaces for collaboration and innovation. If paired with digital literacy initiatives and ethical safeguards, AI integration offers a pathway toward more efficient, data-driven, and sustainable academic environments.

Figure (5) Combined chart reflecting adoption vs. ethical concerns (challenges and opportunities)



The results reveal a contrast between the opportunities of adoption and the challenges of ethical use. Regarding adoption, 14 students (40%) agreed and 7 (20%) strongly agreed that they frequently use AI in their academic activities, while 12 (34.3%) remained neutral, and only 5 students (14.3%) disagreed or strongly disagreed. This shows a clear majority recognizing AI as a valuable academic tool, but also a sizable neutral group indicating cautious or inconsistent adoption. On the other hand, ethical awareness was remarkably high: 18 students (51.4%) agreed and 15 (42.9%) strongly agreed that they are conscious of plagiarism, bias, and misinformation risks when using AI, with only 3 students (8.6%) reporting disagreement or strong disagreement, and 2 (5.7%) remaining neutral.

These results suggest that the main opportunity lies in the growing acceptance of AI as an enabler of academic work, while the main challenge is ensuring its integration is guided by strong ethical practices and supported by institutional frameworks.

Taking into account the findings of the study, a methodology is proposed to guide university students in the effective and responsible use of generative Artificial Intelligence (AI). This approach aims to introduce AI tools into academic practices not as alternatives for critical thinking, but as supplements to improve knowledge management, decision-making, and productivity. By utilizing a combination of awareness, ethical standards, hands-on practice, and reflective review, the approach strives to ensure a degree of digital literacy

and critical skills so that students can utilize AI in the management of their learning, research, and problem-solving while upholding academic integrity and fostering innovation.

Method for Teaching Students to Use Generative AI

– Introduction and Awareness

- Begin by introducing what generative AI is, its main applications, and limitations.
- Discuss real-world examples (academic writing, coding, problem-solving, knowledge management).
- Emphasize that AI is a support tool and not a replacement for critical thinking.

– Ethical and Responsible Use

- Provide guidelines on plagiarism, bias, misinformation, and data privacy.
- Include case studies where misuse of AI led to academic or professional consequences.
- Teach students how to critically evaluate AI outputs, cross-checking with reliable sources.

– Hands-On Workshops

- Task 1: Use AI to brainstorm research ideas or outline a report.
- Task 2: Use AI to generate a draft explanation of a technical concept, then compare it with textbook definitions.
- Task 3: Apply AI for knowledge management—organizing references, summarizing readings, or creating study notes.
- Encourage students to refine prompts (prompt engineering) and observe how responses change.

– Reflection and Critical Evaluation

- Ask students to analyze AI-generated content: What is accurate? What is biased? What needs correction?
- Use rubrics that assess not just the output but the critical evaluation process.
- Promote discussion groups where students compare their experiences using AI.

– Integration into Academic Workflows

- Show how AI can be embedded in academic routines: Drafting essays and research proposals, data analysis support and Knowledge sharing through collaborative tools.
- Teach balance: AI should accelerate learning, not replace intellectual effort.

– Continuous Feedback and Improvement

- Incorporate feedback loops: students submit assignments showing both AI outputs and their revisions.
- Encourage self-reflection logs where students document how AI helped or hindered their learning.
- Update exercises as AI tools evolve, maintaining alignment with current ethical and institutional guidelines.

In conclusion, the suggested lesson plan equips students with the technical skills and ethical knowledge necessary to engage responsibly with generative AI in their academic practice. Through a combination of theory, applied activities, and critical reflection, this approach ensures that AI is used not to remove human reasoning from the equation, but rather to enhance knowledge management, decision-making, and efficiency in academia. Ultimately, this scaffolded approach gives students the ability to address the opportunities and challenges of digital transformation in higher education and prepares them to be inventive and ethical professionals in an age of AI.

CONCLUSION AND RECOMMENDATIONS

The findings of this study demonstrate that generative Artificial Intelligence (AI) tools are increasingly embedded in the academic practices of industrial engineering students, particularly in supporting knowledge management and improving efficiency. Most students indicated that they used AI to generate ideas, organize information, and apply knowledge to solve problems frequently, with particularly strong beliefs regarding AI's role in creating knowledge and decision-making. In the same vein, digital literacy and ethical awareness became enabling factors with most students considering it important to use AI responsibly to avoid issues related to plagiarism, bias, and misinformation. Despite these positive outcomes, challenges remain in ensuring consistent adoption, overcoming neutral or hesitant attitudes, and addressing the risks of overreliance on AI.

With this information in mind, the following recommendations have been offered. First, universities should incorporate digital literacy and AI ethics into their curriculum to better enable students to use these tools mindfully and responsibly. Second, faculty should employ pedagogical approaches that are focused on students' critical examination of AI outputs leading them to reflect

and not simply regurgitate what the AI suggests. Third, institutions should provide structured opportunities—such as workshops and collaborative projects—for students to experiment with AI in ways that align with the knowledge management cycle, from creation to application. Higher education institutions are advised to integrate formal AI literacy modules and faculty-led mentoring schemes designed to strengthen students' capacity for critical, ethical, and reflective use of AI technologies within the knowledge management process, promoting long-term innovation and academic integrity.

Finally, policymakers and academic leaders should establish clear institutional guidelines for AI use in higher education, balancing innovation with integrity. By embracing these measures, universities can ensure that generative AI serves as a catalyst for innovation, collaboration, and efficiency in learning environments, while safeguarding ethical standards and maintaining the central role of human judgment in academic decision-making.

BIBLIOGRAPHY

Aghaee, N. (2024). Using Digital Tools for Information Management in Higher Education. European Conference on Knowledge Management, 25(1), 1-9. https://doi.org/10.34190/eckm.25.1.2734

Asizbaev, R. E., Karbekova, A. B., Umarbekova, Z. K., Akylbek Kyzy, V., & Kasymova, S. M. (2025). MANAGEMENT INFORMATION SYSTEM IN THE INTERACTION BETWEEN UNIVERSITIES AND BUSINESS IN THE AGE OF ARTIFICIAL INTELLIGENCE. Proceedings on Engineering Sciences, 7(2), 1127-1136. https://doi.org/10.24874/PES07.02B.004

Barreto, U., & Abarca, Y. (2025). Integration of the SECI model and ChatGPT in higher education. Heliyon, 11(4). https://doi.org/10.1016/j.heliyon.2025.e42814

Chen, Y., Banerjee, S., Daily, S., Krolik, J., Li, H. (Helen), Limbrick, D., Pajic, M., Runton, R., & Zhong, L. (2024). Athena – The NSF AI Institute for Edge Computing. AI Magazine, 45(1), 15-21. https://doi.org/10.1002/aaai.12147

Choudhury, S., & Routray, P. (s. f.). Knowledge Management: A Bibliometric Review from 2003 2022 | DESIDOC Journal of Library & Information Technology. Recuperado 1 de octubre de 2025, de https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/19309

Costa Balarezo, E. I., & Chávez Costa, J. N. (2025). Inteligencia Artificial como impulsor de la gestión del conocimiento y la eficiencia académica: un estudio descriptivo en estudiantes universitarios peruanos. figshare. https://doi.org/10.6084/m9.figshare.30262216

Kim, K. A., Hong, S., Yoo, S., Kang, Y., & Shim, H. S. (2025). Enhancing Structured Pathology Report Generation With Foundation Model and Modular Design. IEEE Access, 13, 121290-121299. https://doi.org/10.1109/ACCESS.2025.3588121

Koonce, T., Giuse, D., Williams, A., Blasingame, M., Krump, P., & Giuse, N. (s. f.). JMIR Medical Informatics—Using a Natural Language Processing Approach to Support Rapid Knowledge Acquisition. Recuperado 1 de octubre de 2025, de https://medinform.jmir.org/2024/1/e53516

Tsoi, J. C., & Strønen, F. (2024). Integration of Conversational AI Capabilities in Knowledge Management Processes for Higher Education. European Conference on Knowledge Management, 25(1), 1026-1033. https://doi.org/10.34190/eckm.25.1.2659

Zhang, P., Zhang, J., Wang, M., Feng, S., Yuan, Y., & Ding, L. (2024). Research hotspots and trends of neuroimaging in social anxiety: A CiteSpace bibliometric analysis based on Web of Science and Scopus database. Frontiers in Behavioral Neuroscience, 18. https://doi.org/10.3389/fnbeh.2024.1448412

Zou, X., & Chen, X. (2023). New Vocational Education Law on Artificial Intelligence Helps Build a Skilled Society. Applied Mathematics and Nonlinear Sciences, 9(1). https://doi.org/10.2478/amns.2023.2.01642