Tacit Knowledge Seeking in the Age of AI: Implications and Safeguards

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Abstract—This paper examines how the increasing use of artificial intelligence (AI) may influence employees' knowledge-seeking behavior and its implications for tacit knowledge development within organizations. A structured literature review of prior research centered on tacit knowledge, artificial intelligence in the workplace, and knowledge-seeking behavior was conducted. A thematic analysis of relevant literature suggests a dual effect: AI may reduce interpersonal interaction and weaken informal learning processes, while also enabling greater collaboration by reducing time spent on routine tasks. These contrasting effects highlight a tension between efficiency and social learning in AI-enabled environments.

This paper addresses the limited research on how AI influences employees' knowledge-seeking behavior and offers directions for preserving tacit knowledge in AI-enabled work environments.

Keywords—Tacit Knowledge; AI; Knowledge-Seeking Behavior; Organizational Learning

I. Introduction

Artificial Intelligence (AI) is rapidly reshaping the way many employees complete organizational tasks. From ChatGPT to more advanced tools, employees can quickly access data for various purposes including information retrieval, problem solving, and decision making. Employees can obtain answers, generate options, and complete tasks with less delay than in many traditional knowledge systems. From an organizational standpoint, these capabilities promise gains in efficiency and productivity. Supporting this view, a 2023 report found that generative AI increased productivity in knowledge-intensive tasks by 40 to 60 percent [13].

However, the growing use of AI raises concerns beyond productivity measures. Traditionally, employees relied on experienced colleagues for assistance. For example, new employees would naturally seek the guidance of senior employees to understand a workplace situation. Even experienced employees might consult knowledgeable coworkers when facing unfamiliar issues, complex decisions, or situations requiring specialized expertise. Such interactions did more than simply provide answers; they enabled the transfer of tacit knowledge.

Tacit knowledge is experience-based and rooted in experience, judgment, and situational understanding. This form of knowledge is difficult to articulate and formalize [3], yet it remains a critical source of organizational learning, capability and competitive advantage. Tacit knowledge provides employees practical insights and contextual understanding of workplace issues.

Beyond understanding what tacit knowledge is, it is equally important to understand how it is transferred within organizations. Traditionally, tacit knowledge is passed from one colleague to another through collaborative practices and interpersonal processes including social interactions, observation, mentoring, and informal conversations. It involves navigating social networks to identify "who knows what" in an organization. The process of seeking tacit knowledge contributes not only to learning, but also trust building, team development, and the gradual development of expertise.

As AI becomes more prominent in organizations, opportunities for interpersonal learning may decline. The same employees who would normally ask a senior colleague for advice might increasingly rely on an AI assistant or chatbot for immediate support. While this shift may produce efficient results, it raises an important question: what happens to tacit knowledge if employees stop asking one another for help?

Although existing literature examines AI adoption and knowledge management from multiple perspectives, little attention has been given to how AI may influence tacit knowledge-seeking behavior. This issue is developed further in the following problem statement.

II. Problem Statement

With the integration of AI to enhance organizational efficiency and productivity, a potential paradox emerges. The same technology intended to improve knowledge management could also weaken the foundation of tacit knowledge – the informal employee to employee networks through which tacit knowledge is accessed and transferred. Gradually, the impact could lead to reduced interpersonal learning, experiential knowledge sharing, and the subtle erosion of valuable organizational knowledge.

To better understand this concern, further research is needed on the risks AI may pose to tacit knowledge processes. While recent studies explore the intersection of these two topics from various perspectives including AI adoption; knowledge capture, processing, and maintenance; and the benefits of intelligent systems, there remains substantial room to explore how AI affects employees' knowledge-seeking behaviors and the consequences to tacit knowledge.

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This gap is significant because weakened informal learning networks could undermine tacit knowledge exchange which is essential for organizational learning and can ultimately reduce an organization's resources, capabilities, and competitive advantage.

III. RESEARCH QUESTIONS

This study is guided by following research questions:

1. How does the use of artificial intelligence influence tacit knowledge-seeking behavior in organizations?
2. What are the implications of reliance on artificial intelligence for tacit knowledge transfer within organizational contexts?
3. How can organizations preserve tacit knowledge-seeking in AI enabled environments?

IV. LITERATURE REVIEW

This study draws on two interconnected streams of literature: tacit knowledge in organizations and artificial intelligence in knowledge work.

The literature on tacit knowledge emphasizes its experiential, context-specific, and difficult-to-codify nature [2] [3]. Tacit knowledge is developed through practical experience and is primarily transferred through informal communication and social processes such as interpersonal connections, mentoring, observation, and collaboration [1]. Within knowledge management research, it is widely recognized as a key driver of organizational learning, innovation, and sustained competitive advantage. As noted by some researchers, tacit knowledge may be an organization's most significant resource [4].

The second stream - artificial intelligence in organizations - is addressed in current literature with some significance. Although research on AI in knowledge management is still developing, several studies highlight AI's increasing role in supporting knowledge work [5]. Evidence suggests that AI has been adopted by various entities to improve knowledge acquisition, provide solutions to problems, optimize solution systems, and for modeling purposes [6].

Examined independently, both research streams provide valuable insights for organizations. Existing studies have begun to explore the impact of AI on knowledge management processes [7] including its associated challenges [8] and benefits [9]. Other studies examine how to successfully integrate AI with knowledge management and other organizational factors [10] [11].

While the combination of these topics continues to be explored from various angles, an important gap remains. The tacit knowledge literature assumes that employees seek knowledge through interpersonal interaction, whereas the AI literature often focuses on a shift toward tool-based knowledge access. However, limited research examines how potential shifts in tacit knowledge-seeking behavior—from reduced reliance on interpersonal interactions to consulting AI—may impact the development and transfer of tacit knowledge. This shift may alter the processes that sustain tacit knowledge within organizations as well as intended outcomes. The present study seeks to address this gap.

V. CONTRIBUTIONS

This paper extends the conversation on artificial intelligence and knowledge management in two important ways. First, it explores an emerging tension between AI adoption and tacit knowledge processes by examining how AI reshapes employees knowledge-seeking behavior. This shifts the lens from the technical benefits of AI adoption to a behavioral perspective that has received less emphasis, highlighting how changes in knowledge-seeking practices may influence tacit knowledge development.

Secondly, the paper introduces a conceptual explanation of how employees' increased reliance on AI in their everyday work setting may reduce opportunities for interpersonal consultation, thus impacting tacit knowledge transfer. AI makes it easier to access information, but it may reduce the need for colleagues to interact. This shifts the conversation from short-term productivity gains to long-term capability development.

Furthermore, it provides practical recommendations for management to successfully implement AI without losing the human interactions critical to tacit knowledge development and transfer.

VI. METHODOLOGY

The study adopts a qualitative conceptual design based on a structured review of existing literature using Denyer and Tranfield's five-step systematic review approach [14]. This framework provides a transparent and structured process for synthesizing prior research. It consists of five stages: (1) question formulation, (2) locating studies, (3) study selection and evaluation, (4) analysis and synthesis, and (5) reporting the results.

The key question revolved around developing a clearer understanding of how AI may influence tacit knowledge-seeking behavior in organizational settings. A collection of academic articles was obtained using various databases including Scopus, Web of Science, and Google Scholar using a systematic process. The literature search focused on three key topic areas:

1. Tacit Knowledge: foundational and contemporary studies that explore the meaning, value, and transfer of tacit knowledge within organizations.
2. AI in the Workplace: studies that examine how AI influences the actions and behaviors of employees.
3. Employees Knowledge-Seeking Behavior: Research exploring how employees seek, share, and apply knowledge in organizational settings.

Articles were selected for deeper review if they addressed one or more of the following criteria:

- Peer reviewed journal articles
- Publications within the past 10 years, with exceptions for earlier seminal publications.

- Studies examining tacit knowledge, knowledge management, and AI in the workplace.

At present, a total of 17 peer-reviewed articles have been retained for inclusion in the review and analyzed using thematic analysis to identify recurring patterns, key concepts, and emerging themes related to AI, tacit knowledge, and employee knowledge-seeking behavior.

A conceptual review is appropriate for this topic because organizational use of AI is still evolving, and empirical evidence regarding its long-term effects on tacit knowledge remains limited. Therefore, this approach provides a foundation for future survey, case-study, and longitudinal research.

VII. PRELIMINARY FINDINGS

Drawing on thematic analysis of the reviewed literature, the following propositions are proposed:

P1: Reliance on AI systems rather than colleagues for knowledge - seeking reduces interpersonal social interactions, which in turn weakens the development and exchange of tacit knowledge over time.

P2: Reliance on AI generated solutions without colleague engagement in the problem-solving process reduces experiential learning within teams and weakens the development of tacit knowledge over time.

P3: AI use increases the frequency of employee social interactions by reducing time spent on routine tasks, thereby enabling greater opportunities for higher order thinking and collaborative discussion that enhances tacit knowledge over time.

P4: Managerial policies and organizational practices influence how the tension between AI-driven efficiency and socially embedded tacit knowledge processes is resolved.

VIII. IMPLICATIONS

The outcomes of this study present several important implications that aid in understanding the impact of artificial intelligence on employee's knowledge-seeking behavior. The proposed propositions suggest that AI's influence is complex with pathways that potentially enhance and erode tacit knowledge access and development.

The propositions (P1, P2) suggest that increased reliance on AI may reduce interpersonal interaction and limit engagement in collaborative problem solving. As employees shift their knowledge-seeking behavior from consulting colleagues to relying on AI prompts, opportunities for social interactions may decline. This shift may weaken knowledge ties between employees, reducing exposure to experiential insights and informal learning that typically emerge from social interactions. In other words, AI may help employees obtain solutions, but the underlying reasoning processes that typically develop from interacting with experienced colleagues may be diminished, resulting in the decoupling of problem solving from learning.

Furthermore, as employees increasingly use AI instead of interacting with colleagues the strength, quality and role of informal organizational networks in facilitating knowledge sharing may lessen. Even if such ties remain intact, reduced engagement limits the depth of interactions. Consequently, opportunities for collaboration and shared understanding may decline, potentially affecting how knowledge is disseminated across the organization.

While P1 and P2 highlight the constraining effects of AI on knowledge-seeking behavior, P3 suggests a contrasting outlook whereby AI creates opportunities for increased employee interactions by reducing the time typically spent on routine tasks such as information retrieval, report generation, or basic data analysis. Freed from time-consuming mundane tasks, employees have greater availability for social interactions including informal exchanges such as conversations during coffee breaks. These interactions strengthen personal bonds that facilitate future sharing and reinforce the social processes underlying tacit knowledge development.

Collectively, these implications suggest that while AI can improve efficiency in knowledge access, it may also unintentionally disrupt the social processes that define tacit knowledge development. Therefore management must ensure that AI adoption is accompanied by practices and policies aimed at sustaining interpersonal interaction and the continual development of tacit knowledge [P4]. To this end, the study provides practical recommendations for organizations to preserve tacit knowledge - seeking in AI-enabled workspaces. Some key recommendations are:

Organizations must recognize that far from simply improving efficiency, AI changes how people learn and interact.

Established policies for AI usage should emphasize the use of AI to support work while keeping human interaction intact.

Encourage interaction through active mentoring and coaching programs.

Formalize informal conversations with organizational practices and events that drive informal knowledge exchange.

Promote AI-aware knowledge training to help employees develop judgement in seeking AI support or human support.

IX. CONCLUSION AND FUTURE RESEARCH

This study highlights an emerging tension between the increasing use of artificial intelligence and the social processes that facilitate tacit knowledge development within organizations. By examining how AI may shift employees' knowledge-seeking behavior away from interpersonal interaction, the paper suggests that AI adoption may have unintended consequences for informal learning and tacit knowledge development. Given the conceptual nature of this research, future empirical studies are needed to examine how AI influences knowledge-seeking behavior in practice. Additionally, longitudinal research is required to understand AI's long-term effects on knowledge-seeking behavior and tacit knowledge development.

REFERENCES

[1] Ali, H.A.A., Elanain, H.M.A., and Ajmal, M.M. (2016), "Knowledge sharing-behaviour as a mediator of the relationship between

organizational justice and organizational performance in the UAE", *International Journal of Applied Management Science*, Vol. 8, No. 4, pp. 290-312.

[2] Nonaka, I. (1991), "The Knowledge-Creating Company", *Harvard Business Review*, Vol. 69, No. 6, pp. 96-104.

[3] Polanyi, M. (1969), "The logic of tacit inference", in Grene, M. (Ed.), *Knowing and Being*, Routledge & Kegan Paul, London.

[4] McAdam, R., Mason, B., and McCrory, J. (2007), "Exploring the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations", *Journal of Knowledge Management*, Vol. 11, No. 2, pp. 43-59.

[5] Alhashmi, S.F.S., Salloum, S.A., and Abdallah, S. (2019), "Critical success factors for implementing artificial intelligence (AI) projects in Dubai Government United Arab Emirates (UAE) health sector: Applying the extended technology acceptance model (TAM)", in *International Conference on Advanced Intelligent Systems and Informatics*, Springer, Berlin/Heidelberg, Germany.

[6] Taherdoost, H., and Madanchian, M. (2023), "Artificial intelligence and knowledge management: Impacts, benefits, and implementation", *Computers*, Vol. 12, No. 4, p. 72.

[7] Nakash, M., and Bolisani, E. (2025), "The transformative impact of AI on knowledge management processes", *Business Process Management Journal*, Vol. 31, No. 8, pp. 124-147.

[8] Njiru, D.K., Mugo, D.M., and Musyoka, F.M. (2025), "Ethical considerations in AI-based user profiling for knowledge management: A critical review", *Telematics and Informatics Reports*, Vol. 18, p. 100205.

[9] Arakpogun, E.O., Elsahn, Z., Olan, F., and Elsahn, F. (2021), "Artificial Intelligence in Africa: Challenges and Opportunities", in *The Fourth Industrial Revolution: Implementation of Artificial Intelligence for Growing Business Success*, pp. 375-388.

[10] Olan, F., Arakpogun, E.O., Suklan, J., Nakpodia, F., Damij, N., and Jayawickrama, U. (2022), "Artificial intelligence and knowledge sharing: Contributing factors to organizational performance", *Journal of Business Research*, Vol. 145, pp. 605-615.

[11] Sanzogni, L., Guzman, G., and Busch, P. (2017), "Artificial intelligence and knowledge management: questioning the tacit dimension", *Prometheus*, Vol. 35, No. 1, pp. 37-56.

[12] Retkowsky, J., Hafermalz, E., and Huysman, M. (2024), "Managing a ChatGPT-empowered workforce: Understanding its affordances and side effects", *Business Horizons*, Vol. 67, No. 5, pp. 511-523.

[13] Yan, J., Husted, K., and Fath, B. (2026), "Transforming organizational knowledge creation through artificial intelligence: a systematic review of the emergent literature", *VINE Journal of Information and Knowledge Management Systems*, Vol. 56, No. 2, pp. 522-540.

[14] Denyer, D., and Tranfield, D. (2009), "Producing a systematic review", in Buchanan, D.A. and Bryman, A. (Eds), *The Sage Handbook of Organizational Research Methods*, Sage Publications Ltd, pp. 671-689.