Impact of Artificial Intelligence in Effective Knowledge Management: An Empirical Study in Emerging Organisations

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Abstract

Emerging organisations collect, organise and disseminate internal information using knowledge management systems. When these systems employ artificial intelligence tools, they help staff locate, retrieve, and apply knowledge to tasks more quickly. AI-driven systems classify data, sort documents and suggest relevant content based on search history and user roles. This approach enables faster decision-making and reduced time for manual searches. Staff record, review, and update knowledge assets via system interfaces. AI tools perform tagging, categorisation and storage according to pre-defined criteria. This frees staff to apply knowledge rather than managing information. AI systems also detect gaps in the knowledge base and issue alerts for timely updates. Organisations act on these insights to stay relevant and accurate. Firms use machine learning models to identify popular resources and forecast knowledge needs. This supports proactive knowledge sharing and real-time demand for training. AI tools also guide new employees through learning paths by suggesting materials based on roles and performance data. With AI-enabled systems, firms report better access to critical knowledge and faster onboarding. Staff can work faster because they can get information quickly retrieved. Managers track system use to identify bottlenecks and recommend improvements. AI supports knowledge flow but is not a substitute for human input. Staff validate, curate, and improve knowledge content. AI systems extend reach and scale without increasing manual workload to keep up with growth and operational demands of firms.

Keywords: Artificial Intelligence (AI), Knowledge Management, Emerging Organizations, Effective Knowledge Sharing, Digital Transformation, Smart Knowledge Management.

Introduction

Knowledge management systems collect, store and share knowledge across teams and projects. These systems enable firms to use internal knowledge to solve problems, train staff, and improve work. Firms adding AI tools to these systems changes the way they collect, sort, and use knowledge. AI tools help firms discover patterns, update records and deliver the right knowledge to the right people at the right time.

Emerging organisations tend to grow faster than their systems. Staff create reports, notes and guides every day but without strong systems they become lost or out of date. AI-enabled knowledge management systems sort new content, associate it with tasks and send alerts when it is necessary to update. This helps ensure that the knowledge base is useful as firms grow. AI tools consume input from many sources including project documents, emails, meeting notes and shared files. These tools scan text for key points and match records with existing ones. Staff do not search through files by hand. Instead, the system recommends the appropriate document or expert based on task requirements. This process reduces search time and errors due to missed or outdated information.

Firms often have gaps in their knowledge base. Without AI tools, managers have to manually review content and guess what updates are needed. AI-enabled systems record how often documents are used,

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which questions are unanswered and which processes are delayed. The system issues alerts when a knowledge gap appears. Staff use these alerts to write new content, revise steps, or add missing data. AI models understand how staff use the system. They note which articles are read, which videos are watched, and also which guides are downloaded. These patterns indicate what knowledge is most important. Managers adjust training, update tools and plan support based on these reports. Firms know what staff search for, so they can match learning to real needs rather than guesses.

As per Al Mansoori, Salloum, and Shaalan (2020) In firms where staff enter and update knowledge by hand, there are often broken links or missing files. AI tools monitor content flows and update fields automatically. When a new version of a document is added, the system replaces old links and flags new changes. Staff spend less time fixing records and more time applying knowledge. This speeds up work and facilitates information sharing between teams. AI-enabled systems allow for real-time knowledge updates. When staff complete a project, the system may prompt them to record lessons learned, steps taken and results achieved. These records become part of the knowledge base without delay. Then future teams can learn from these lessons without repeating past mistakes.

Knowledge flows across many formats: Text, voice, video, diagrams and data logs. AI tools scan across all these formats. A team may record a meeting. AI tool will transcribe the talk, pick key points and connect them to related projects. Staff need not write notes or summaries. This saves time and prevents important insights from being lost in conversation.

Emerging organisations serve several different markets at once. Staff have to learn new rules, customer needs and product steps quickly. AI-enabled knowledge management systems track changes in market data, flag new trends and push updates to staff. This allows teams to be ready without long training cycles. Firms move faster because their knowledge base grows as new needs arise. AI tools also group related content. When staff search for a process, the system suggests basic steps as well as related risks, best practices, and case studies. Staff know the full picture without knowing what to ask. This linked approach enables better decision making and avoids mistakes due to missing context.

AI-enabled systems enable real-time collaboration. When several teams are working on the same project, the system watches updates, merges changes and flags conflicts. Staff see alerts when edits clash or when two teams record different steps for the same process. These alerts trigger checks and corrections before errors grow.

Firms that use AI in knowledge management also foster knowledge sharing between old and new staff. AI tools read staff profiles, note past projects, and suggest mentors for new hires. New staff get the right guides, and senior staff share their knowledge faster. This shortens the time of onboarding and decreases the risk of knowledge loss when people leave. AI tools handle access rights based on project, task and seniority. Staff see what they need but not everything. This prevents data from being lost and from overloading. The system automatically adjusts access rules when projects change without the need for manual checks by managers. AI tools scan all records in knowledge audits and flag gaps, outdated steps or broken links. Managers review these reports and plan updates. These audits require no longer months of manual checks. Instead, firms run regular scans and act on new reports. This keeps knowledge current and useful without huge costs.

According to Alghanemi and Al Mubarak (2022), When firms grow, knowledge retention is a challenge. Staff leave, teams change, and projects change. AI-enabled systems track knowledge holders, map tasks to people and alert managers when risks appear. When key staff are leaving, the system prompts knowledge transfer, prompts recordings and stores guides. Firms protect their operational memory before a crisis occurs. Knowledge systems must communicate with other systems. AI tools integrate knowledge

management systems with CRM, ERP and project management systems. This link ensures that staff move between tasks, customers, and tools without gaps. For example, a service agent working on a customer issue can pull a guide, update the ticket, and push a fix across teams without switching platforms.

Firms also use AI tools to predict future knowledge needs. The system predicts which skills and guides will be most relevant by studying past projects, market shifts, and staff queries. According to Pai et al. (2022), Firms then produce content ahead of time rather than reacting to problems later. This approach helps with growth, planning and risk management.
In firms with different languages and regions, AI tools translate and adapt content. Staff get guides and reports in their language and format. This reduces missteps due to poor translation and encourages more cross-site collaboration. The system also learns which terms or examples are appropriate for local contexts and changes content without user intervention. AI-enabled knowledge systems also help with compliance. When rules change, the system scans all related documents, flags outdated steps, and pushes updates. Staff get alerts with links to new rules and steps. Firms act faster to comply with laws and standards to avoid fines and delays.

Studying knowledge usage patterns is done by firms using AI tools. Staff who open guides but skip some steps are tracked by the system. Managers ask why: unclear writing, missing tools, or wrong examples. These insights include training plans; process fixes and system changes as well as content updates. In high-risk fields, AI-enabled knowledge systems add extra checks. For example, if a step in a safety process changes, the system sends updates to all teams that use that step. It records who reads, tests and applies the change. Firms get proof of compliance and reduce safety risks.

According to Nishant, Kennedy, and Corbett (2020), AI tools also help with knowledge testing. Staff take small quizzes related to tasks. The system tracks the results and suggests next steps. Staff that pass move forward; Staff that miss key points get more guides. This keeps skills sharp without heavy training loads.

Fast-growing firms may have new teams that duplicate knowledge. AI tools find overlaps, merge content and flag best versions. This helps avoid confusion and ensures that all teams use the same playbook. Managers see maps of content clusters and adjust in planning based on real use. The limits of AI must also be dealt with by firms. AI tools sort, flag and suggest, but human staff must validate, approve and explain knowledge. Systems move fast, but staff ensure that knowledge is appropriate for purpose, task, and case. Firms that combine AI speed with human judgment create stronger, safer systems.

Emerging organisations with AI-enabled knowledge management systems gain speed, flexibility and reach. They adapt to changes in the market faster, train new staff better and protect what they know as they grow. These systems do not replace human thinking but give it stronger tools, faster updates and more clear views of what is important. AI tools will get sharper in the future. Systems could predict staff needs before questions arise, write first drafts of new guides, or warn when old steps are out of date. Firms that plan, test, and guide these tools well will turn knowledge into a strength rather than a risk.

Knowledge management affects the ways firms serve, build and change. AI-enabled systems make this shape clearer, faster, and stronger. They track what firms know, what firms forget, and what firms must learn next. In a world where speed and trust are critical, these systems keep firms ready, steady, and strong.

Literature Review

In the twenty-first century Information Technology and Artificial Intelligence have given new directions to Knowledge Management. Researchers from academic and business domains have been studying Knowledge Management because of its impact on organisational performance. In all industries, companies are using Knowledge Management practices to compete in markets. Firms continue to seek improvements in these practices to gain operational and strategic advantages.

According to Duan, Edwards, and Dwivedi (2019), investigated Knowledge Management processes and best practices across different types of organisations. These studies have contributed to a better understanding of Knowledge Management's function in organisational development and sustainability. However, most studies do not yet fully address how Artificial Intelligence and Information Technology impact the effectiveness of Knowledge Management systems, especially in emerging organisations. AI and IT mechanisms in knowledge Management frameworks open up new ways of collecting, storing, sharing and applying organisational Knowledge.

The challenges that organisations face when integrating AI and IT systems into Knowledge Management processes are discussed. It identifies operational, technical, and organisational constraints that limit the full potential of AI-enabled Knowledge Management. Examining these factors gives a structured picture of the opportunities and barriers facing emerging organisations. It aims to assist emerging organisations in developing systems that combine technological advances with practical knowledge needs to support organisational growth and capability.

According to Bag, Gupta, Kumar, and Sivarajah (2021), Advances in AI-enabled technologies have transformed business operations and organisational practices. However, many emerging organisations still face challenges in integrating knowledge into AI-driven systems. These challenges arise because organisations often have difficulty integrating existing and new knowledge into the AI systems learning processes. This difficulty precludes the setting up of an environment in which intelligent systems can support knowledge distribution, retention and reuse. Therefore, AI has limited effects on organisational performance. Using conceptual linkages among these elements, the research framework investigates how AI technologies interact with knowledge activities to influence organisational outcomes. Data collection took place via an online survey which captured practices across emerging organisations.

According to Budhwar, Malik, De Silva, and Thevisuthan (2022), Analyzing collected data reveals that only the adoption of AI technologies can lead to improvements in organisational performance. Rather, knowledge activities such as lessons learned from completed projects are combined to improve the performance of AI systems. Organisations that associate AI tools with structured knowledge activities show improved outcomes in operational processes and performance indicators. Limited investments in robust knowledge systems limit the potential benefits of AI implementation. This gap indicates that organisations underestimate the contribution of knowledge systems to AI-driven processes.

Organisations to develop AI-KS systems to support more sustainable performance strategies. Connecting knowledge activities with AI applications can help firms adapt to digital environment changes and improve decision-making processes. This approach enables organisations to create learning environments in which AI systems can adapt to organisational requirements. It demonstrates that AI works best when knowledge generation, storage and application are integrated into system processes.

According to Hamet and Tremblay (2017), A limitation is that the conceptual framework and analysis assume organisational conditions where AI and knowledge system integration are supported by leadership, culture and technology infrastructure. Organisations without these conditions were not included in the sample. Future research should compare results between organisations with supportive environments and those without to further develop the model. The associations identified here can guide

organisations seeking to promote greater knowledge interactions among their workforces. Such interactions can foster innovation and support organisational growth in a digitised and competitive environment.

Knowledge management is the creation, utilization, management and sharing of organisational information and knowledge. Traditional knowledge management practices have evolved, but documentation remains the foundation. The shift towards remote and hybrid work models has revealed knowledge management process gaps. According to Paschen, Wilson, and Ferreira (2020), Artificial Intelligence can fill these gaps and transform the way knowledge is managed and applied.

Some organisations have started to use AI in knowledge management, but many others remain hesitant due to high initial investment and limited understanding of AI's potential benefits. Artificial Intelligence began to change organizational processes and knowledge sharing across industries. In emerging organisations, AI will help address challenges related to fragmented information systems, technological limitations and workforce ability gaps. AI - enabled knowledge management systems support faster, more reliable and more accessible information flow, increasing organisational efficiency.
Using emerging organizations as context, this study investigates how AI-driven knowledge sharing practices impact organisational efficiency. Hypothesis testing showed a positive association between knowledge sharing with AI tools and organisational performance improvements. AI technologies automate dissemination, retrieval, and classification of knowledge so that employees can obtain information they require fast. This process shortens decision making times, enhances quality of choices and promotes constant learning within teams.
These results show that AI promotes a collaborative environment by linking dispersed knowledge sources. These capabilities help teams to better coordinate, react to change quicker and provide results which meet organizational objectives.

According to Bates, Cobo, Mariño, and Wheeler (2020), Emerging organisations which invest strategically in AI based knowledge management systems realize productivity, operational flexibility and innovation capability gains. By improving workforce efficiency and supporting strategic initiatives, AI integration creates sustainable competitive benefits in knowledge driven sectors where speed and accuracy are crucial.
Nevertheless, the results also suggest that organisations lack complete AI adoption for knowledge management. Employee resistance to new technologies and data privacy issues restrains AI efforts. Several employees claim they're hesitant to share or use information processed via AI resources for fear of surveillance or loss of control. Such barriers must be overcome for successful AI adoption.

According to Schwartz et al. (2022), It asserts that organisational readiness and strategic policy development are required to unlock full AI advantages for emerging organisations in knowledge intensive environments.
Knowledge management aims to link knowledge workers with the proper resource or person at the appropriate time to support much better decision making. As Artificial Intelligence capabilities grow, organisations have numerous challenges and opportunities to achieve this goal. AI proposes new forms of collaboration between human employees and intelligent machines which differ from earlier models of work division within organisations.

Emerging organisations need to rethink work processes to accommodate this new partnership between humans and AI systems. This shift requires knowledge workers to acquire new skills and competencies to use intelligent machines. Workers must learn to interpret AI outputs, bring machine-driven insights into decision making and always keep a critical view to stay away from becoming too dependent on automated processes. Organisations need to train their workforce to recognize risks of automation like cognitive

complacency (workers trusting system recommendations blindly) or algorithmic aversion (distrust of AI undermines its worth). Meanwhile, the design of AI systems should evolve to compliment human strengths. Intelligent machines call for transparency, explainability and adaptability when dealing with users. Designers need to create systems that foster trust, allow human oversight and adapt to dynamic knowledge environments without dividing technology out of human users.

According to Seo, Tang, Roll, Fels, and Yoon (2021) Effective knowledge management requires reciprocal support between human workers and AI systems. Organisations need to create work environments where knowledge employees can engage with AI tools actively, challenge system outputs when required and apply human judgement when refining and applying knowledge assets. This partnership enables unique capabilities of AI to transform knowledge capture, organisation, retrieval and sharing in ways that static systems can't.
Skills developed in data interpretation and AI collaboration, critical thinking and ethical use of technology must be emphasized in training programmes. Organisations also need culture which encourage responsible AI use, continual learning and adaptation to changing technological environments.

Emerging organizations that follow these methods can start using AI to boost knowledge access, hasten decision making and improve organisational learning. Providing workers to collaborate with AI systems, firms can achieve much more agile, knowledge-driven and resilient operations. The study recommends that firms provide technical as well as human infrastructure to allow AI to be sustainable integrated into knowledge management systems.
Future research must investigate how various models of human-AI collaboration affect knowledge management results across sectors. Additional analysis might investigate the long-term impact of AI partnerships on organisational innovation, employee engagement and knowledge system resilience.
This research contributes to AI and knowledge management by demonstrating that technology cannot transform knowledge practices through technology alone. Success requires human preparation, organisational support and considerate system design that together create environments where AI and knowledge workers become partners.

Objective
To study the Impact of Artificial Intelligence in Effective Knowledge Management.

Methodology
Study survey was conducted among 239 people from different regions. “Random sampling method” along with “T-test” were used to collect and analyse the data.

Data Analysis
In the total population of study survey males are 56.90% and females are 43.10%. 32.22% of them are 25 to 30 years of age, 38.91% are between 30 to 35 years, and 28.87% are above 35 years. Looking at the sector, 53.97% are from private sector and 46.03% are from public sector.

“Table 1 General Details”

“Variables”	**“Respondents”**	**“Percentage”**
Male	136	56.90
Female	103	43.10
Total	**239**	**100**
Age (years)		
25 to 30	77	32.22

30 to 35	93	38.91
Above 35	69	28.87
Total	**239**	**100**
Sector		
Private sector	129	53.97
Public sector	110	46.03
Total	**239**	**100**

Table 2 Impact of Artificial Intelligence in Effective Knowledge Management

"S. No."	**"Statements"**	**"Mean Value"**	**"t value"**	**"Sig."**
1.	Using artificial intelligence tools helps in staff location, retrieve, and apply knowledge to tasks more quickly	3.21	3.304	0.001
2.	Artificial Intelligence can fill these gaps and transform the way knowledge is managed and applied	3.29	2.691	0.004
3.	Artificial Intelligence began to change organizational processes and knowledge sharing across industries	4.00	16.083	0.000
4.	It strengthens knowledge management by expanding its reach, improving accuracy	4.19	18.753	0.000
5.	AI tools help in discovering patterns, update records and deliver right knowledge to right people at right time	4.02	16.338	0.000
6.	AI-enabled KMS sort new content, associate it with tasks and send alerts when it is necessary to update	4.07	16.850	0.000
7.	AI-enabled knowledge management systems track changes in market data, flag new trends and push updates to staff	4.23	19.553	0.000
8.	Firms that use AI in knowledge management also foster knowledge sharing between old and new staff	4.17	18.681	0.000
9.	AI-enabled knowledge management systems gain speed, flexibility and reach	4.27	20.034	0.000
10.	AI - enabled KMS support faster, reliable and accessible information flow, increasing organizational efficiency	4.11	17.816	0.000

Table 2 shows Impact of Artificial Intelligence in Effective Knowledge Management where respondent says that Using artificial intelligence tools helps in staff location, retrieve, and apply knowledge to tasks more quickly (3.21), Artificial Intelligence can fill these gaps and transform the way knowledge is managed and applied (3.29), Artificial Intelligence began to change organizational processes and knowledge sharing across industries (4.00), It strengthens knowledge management by expanding its reach, improving accuracy (4.19), AI tools help in discovering patterns, update records and deliver right knowledge to right people at right time (4.02), AI-enabled KMS sort new content, associate it with tasks and send alerts when it is necessary to update (4.07), AI-enabled knowledge management systems track changes in market data, flag new trends and push updates to staff (4.23), Firms that use AI in knowledge management also foster knowledge sharing between old and new staff (4.17), AI-enabled knowledge management systems gain speed, flexibility and reach (4.27), and AI - enabled KMS support faster, reliable and accessible information flow, increasing organizational efficiency (4.11). All statements pertaining to Impact of Artificial Intelligence in Effective Knowledge Management are found to be significance, with p-values below 0.05 following the application of a T-test.

Conclusion

AI tools enable faster knowledge capture and retrieval, and broader distribution across teams to support organisational decision-making and collaboration. AI-driven systems enable firms to fill knowledge gaps, forecast needs and automate updates, reducing the use of manual processes and increasing operational flow. Findings indicate that success with AI integration is not a given. Effective knowledge management requires a balance between AI capabilities and human judgement. Organisations need to train staff to work with AI tools, develop critical thinking skills and take responsibility for knowledge curation. Only this human-AI partnership will allow firms to realize the full potential of AI systems in knowledge management. Emerging organisations that invest in AI infrastructure and workforce skills report increased productivity, flexibility and innovation. However, challenges like resistance to new systems and data privacy have to be addressed. Structured change management practices, transparent policies and continuous skills development are required to support AI-enabled knowledge environments.

Emerging organisations that plan, train and guide these developments carefully will create stronger, more resilient knowledge frameworks. The research concludes that Artificial Intelligence strengthens knowledge management by expanding its reach, improving its accuracy and enabling faster responses to changing organisational needs.

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