

Global Knowledge Management Practices in Information Technology: A Multivocal Literature Review

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Abstract

The rapid pace of technological advancement has created a notable readiness gap within organizations. On one side, are experienced professionals who bring invaluable expertise yet often struggle to adapt to emerging technologies; on the other are recent graduates who possess up-to-date technical skills but lack practical organizational knowledge. This imbalance is frequently reflected in cycles of layoffs and new hires triggered by technological transitions. To mitigate this challenge, knowledge management must adopt specialized strategies that support both the upskilling of new entrants and the reskilling of seasoned employees, thereby strengthening project outcomes and sustaining competitiveness in the marketplace. This study examines the frameworks required for effective knowledge capture and dissemination, with attention to both explicit and tacit forms of knowledge. It highlights the critical role of technological tools and the value of diverse learning environments in facilitating the transfer of tacit knowledge, widely recognized as a key source of competitive advantage. Furthermore, the research explores how organizations can refine their knowledge management approaches to improve workforce performance, drawing on contemporary literature at the intersection of technology and knowledge management. The findings underscore the need for organizations to continuously align their knowledge management systems with evolving business objectives and technological innovations, including cloud computing and artificial intelligence. By systematically identifying, assessing, and enhancing knowledge management practices within project management, this research seeks to bridge existing knowledge gaps and ensure that organizations remain agile and responsive to shifting market demands and technological change.

Keywords

Knowledge workers, Knowledge Management, Tacit Knowledge, Explicit Knowledge, Codifiable knowledge, Social Intelligence.

Introduction

Technological trends evolve rapidly, often shifting every decade, and these changes create a significant readiness gap within organizations. Experienced professionals remain valuable assets due to their expertise, yet they may struggle to immediately adapt to modern technologies. Conversely, fresh graduates bring current technical skills but lack organizational process knowledge. This imbalance is frequently reflected in widespread cycles of layoffs and new hires that accompany each major technological transition.

What is knowledge management? According to Hamel (2006), knowledge management is recognized as a critical asset for organizational success across diverse industries, including information technology. It encompasses the systematic accumulation and dissemination of knowledge not only within individual IT projects but also across the broader organizational portfolio. Effective knowledge management begins with mastering discipline-specific skills and extends to capturing and sharing best practices within communities of practice. This process ensures the strategic alignment of the

workforce with organizational objectives, thereby enhancing both adaptability and long-term competitiveness.

In the information technology sector, rapid adoption of emerging technologies is essential both to retain the experienced workforce and to deliver products that meet market demands. Consequently, knowledge management must embrace agile practices to bridge the gap between graduate upskilling and the reskilling of senior professionals, ensuring continuity in project delivery. To achieve this, organizations require a robust platform or framework for knowledge capture, training facilitation, and progress tracking. Such a system should support employees in acquiring relevant skills, monitor the impact of training initiatives, and provide mechanisms for continuous upgrades and adaptation to technological change.

Deloitte (2020) emphasizes that knowledge remains a critical competitive differentiator in driving organizational performance. The convergence of human capability and machine intelligence presents an unprecedented opportunity for knowledge creation in history. Yet, the rise of advanced technologies, evolving work practices, and shifts in workforce composition are challenging traditional approaches to knowledge management. To fully harness these changes, organizations must redefine their strategies for fostering knowledge creation, thereby enabling the maximization of human potential in the workplace (p. 1).

Knowledge is classified into two categories. The first is explicit knowledge, which is straightforward, easily articulated, and codified for transfer through documents, procedures, and instructions. The second is tacit knowledge, which is complex, subjective, and experiential in nature, making it difficult to replicate or transfer. Tacit knowledge is widely regarded as a source of competitive advantage because it is acquired through informal learning derived from personal and professional interactions. Its uniqueness to individuals has made it a central focus of contemporary practice, where observing and learning from experience enriches market understanding and informs the design and release of products that align with user needs.

The diffusion of tacit knowledge requires both formal and informal learning practices, often facilitated through social interactions (Ritchie & Jorgensen, 2007). Informal knowledge management processes rely on supportive infrastructures for assimilation, communication channels, and links to organizational processes. Specific mechanisms such as mentoring, “lunch-and-learn” sessions, orientation programs, and early training initiatives are particularly valuable for new graduates to assimilate corporate practices. Communities of Practice (CoPs) further enable semi-formal and informal exchanges of ideas, though capturing tacit knowledge remains a significant challenge due to its nuanced and context-dependent nature.

While existing studies emphasize the necessity and dimensions of KM practices, they often lack clarity on the processes and possibilities for transforming tacit knowledge into explicit forms. Because tacit knowledge is dynamic and shaped by cultural contexts, the adoption of suitable knowledge capture and management processes varies according to an organization’s maturity level and the workforce’s awareness of KM requirements.

Literature Review

Evaluating the performance of knowledge management systems involves collecting data through interviews and discussions, and benchmarking against organizational KPIs. Regular performance analysis is essential to ensure that KM systems remain relevant and effective in capturing social behaviour and emerging forms of knowledge. Over time, these systems are expected to mature through continuous evaluation and upgrades, including the integration of IT management processes and advanced technologies such as cloud storage and artificial intelligence (AI). The literature review highlights key insights into the importance and adoption of technology in KM, particularly in response to shifting socio-economic behaviour that influence IT demands.

Seidenfuss and Storm (2022) highlight the importance of knowledge management (KM) in IT projects, emphasizing the need to align KM processes with stakeholder expectations. Their study in southern Australia illustrates how project management methods must be adapted to team culture and regional toolsets to ensure effective outcomes. Similarly, Bitkowska et al. (2022) examine KM integration within Polish organizations, revealing how IT systems can strengthen business processes, improve quality, and respond to market demands.

Wang et al. (2013) propose a structured KM framework for IT service management, designed to address the challenges of heterogeneous and incomplete information. Their model incorporates knowledge acquisition, extraction, and refinement, demonstrated through an analysis of Cisco's VoIP system. Trusson et al. (2014) explore tensions between ICT-based knowledge sharing and actual workplace practices, finding that IT service support staff often prioritize self-reliance and interpersonal skills over prescribed KM processes, exposing a significant awareness gap.

Del Giudice and Della Peruta (2016) show that KM fosters innovation by enabling the accumulation and reuse of structured knowledge, thereby enhancing business performance and supporting new product development. Murnane and Browne (2016a) extend this perspective to IT management education, arguing that professional knowledge is shaped through social interaction and identity formation rather than static transfer, with classroom settings offering valuable opportunities for experiential learning. Heripracoyo et al. (2016b) further demonstrate that KM effectiveness in a telecommunications company depends on the integrated implementation of people, processes, and technology, rather than isolated efforts.

Khuong et al. (2014), inspired by institutional theory, investigate misalignments between KM software design and organizational use in a global IT firm. Their findings underscore the importance of user experience (UX) in bridging expectations and practice, with implications for decision-making processes. Lisanti et al. (2014) focus on SMEs in Indonesia, noting that outdated management practices and limited workforce capacity hinder competitiveness. They argue that KM systems, particularly those supported by SME associations, are essential for modernization and performance improvement.

Gemino et al. (2015) compare plan-based and people-based KM approaches in IT-business projects, concluding that while plan-based methods emphasize documentation alignment, people-based approaches foster shared team knowledge. Both are complementary, though performance validation remains a limitation. Aprirashka et al. (2019) discuss KM in the Indonesian audit institution BPK RI, stressing the need for externalization and socialization processes to strengthen knowledge sharing and infrastructure. Garcia-Gonzalez et al. (2021) present a theoretical model of dynamic capabilities, showing how KM enables organizations to acquire, generate, and combine knowledge to adapt to environmental changes.

Hemmati and Hosseini (2016) examine KM's impact on employee well-being in Sri Lanka, finding that well-designed systems reduce stress and knowledge gaps, though outcomes vary with working conditions. Baradari et al. (2023) integrate IT service management (ITSM) with KM, using fuzzy logic and analytic hierarchy processes to demonstrate how ITSM KPIs influence KM activities. Their proposed joint ITSM-KM model enhances efficiency and effectiveness in digital environments. Finally, Lee et al. (2021) investigate KM's role in enabling business agility in Western firms. They argue that KM supports sensing capabilities, while process integration enables responsive action, together fostering strategic decision-making and competitive advantage in dynamic markets.

Methodology

The Multi-Vocal Literature Review (MLR) is selected as the methodological approach for this study because it extends beyond traditional literature reviews by incorporating peer-reviewed academic sources alongside grey literature, white papers, blogs, and organizational publications. Given the disciplinary focus on modern project management, evidence is drawn from company websites, annual reports, and white papers to support both the theoretical and empirical design of KM system integrations across firms. KM research has emerged as a significant field over the past decade,

particularly within large-scale organizations, as it examines interactions and behaviour through the lens of Grounded Theory.

KM has also become an interdisciplinary area of inquiry, frequently discussed in international conferences such as the IEEE International Conference on Communication Systems and Network Technologies (CSNT), the International Conference on Information and Communication Technology (ICoICT), the Annual International Conference on Enterprise Marketing and Globalization, the Conference on Information Systems and Technologies (CISTI), and the International Conference on Information Management and Technology (ICIMTech). These forums provide case studies and collaborative discussions that influence IT practices worldwide, offering insights into implementation strategies tailored to organizational models and maturity levels. MLR thus enables a holistic exploration of diverse perspectives, maximizing the scope and depth of research within the KM domain.

The MLR approach facilitates extensive engagement with a wide range of databases and journals, including the Journal of Modern Project Management, IEEE Transactions on Services Computing, Knowledge Management Research & Practice, Engineering, Technology & Applied Science Research, Journal of the Association for Information Systems, Irish Journal of Management, Industrial Management & Data Systems, Journal of Knowledge Management, Issues in Information Systems, Information Systems Journal, and the International Journal of Project Management. These sources provide evidence of KM practices across varied organizational contexts, highlighting both established systems and their adaptation to contemporary project management requirements, such as managing global IT workforces.

According to Petter (2023), MLR enables systematic collection, synthesis, and evaluation of diverse research outputs, offering valuable insights into KM, discipline with limited academic coverage in the IT industry. By formulating targeted research questions and applying a structured search and selection protocol, MLR ensures methodological rigor and reproducibility, supporting future investigations in this area.

Moreover, MLR strengthens research quality by incorporating case studies, surveys, and technical reports, enabling the identification of patterns, themes, and research gaps. This approach accommodates qualitative, quantitative, and mixed-method analyses, ensuring comprehensive coverage of KM practices. As technological innovation increasingly outpaces formal academic publication, MLR provides a mechanism to capture broader perspectives from diverse sources.

For this study, reflection from IT professionals was prioritized, with many of the reviewed works employing surveys and interviews as qualitative methods. Building on prior comprehensive reviews, this MLR analysed the top 30 selected articles including the most recent literature review covering KM research published between 2010 and 2024 (see Table I). The selection spans Asia, Australia, Europe, and the USA, encompassing scientific studies, conference proceedings, and findings across systems engineering, informatics, IT services, innovation, business management, and knowledge management. This ensures a robust and high-quality literature base for the study.

Table I

Search Criteria

Lookup	Search Criteria	Search Results
KM Books	High level concepts for keyword search	Top 10
KM as general practice		110
KM for IT		70
Year of publication	1995-2000	2 +
	2000-2010	10+
	2010-2024	50+

	2015-2024	30+
Keyword inclusion search specific to KM in IT	Knowledge workers Knowledge Management process/frameworks/models/systems Tacit Knowledge Explicit Knowledge Codifiable knowledge/information Knowledge sharing Social Intelligence/socio-political knowledge Community of Practice Cognitive knowledge Functional knowledge Cultural knowledge Training /shadowing workforce performance	65+
Keyword exclusion search specific to KM in IT	Quality management Human resource management	
Conference articles	Year: 2015-2024	10+
DB Libraries	IEEE ACM Digital Library ResearchGate Sage publications Emerald publications PMI	10+ 14+ 32+ 27+ 49+ 5+
Conference articles	IEEE, ICIMTech, ICoICT, CSNT, CISTI, etc.,	12+
Industry papers	Visiting their website AWS-Infosys, IBM, Deloitte	3
Qualitative research methodology by academic literatures - survey/interview	Infosys, IBM, Deloitte, Accenture, Microsoft, Google, Apple, Hewlett & Packard, Oracle, SAP, Dell, Intel, Teltech, Ernst & Young etc.,	12+
Finally shortlisted literature	Academic papers -30 Profound IT Industrial publications: IBM, Infosys-AWS, Deloitte	33/53

Findings

KM Lifecycle and Tools

According to the findings of Agnes et al. (2023), small and medium-sized enterprises (SMEs) across both IT and non-IT sectors adopt a wide range of knowledge management (KM) and knowledge management systems (KMS) practices. Among these, formal mechanisms such as face-to-face or distance training, meetings and phone calls, shared information sessions, knowledge repositories, and research studies are the most widely utilized techniques. In contrast, informal practices including communities of practice (CoPs), external and internal benchmarking, organizational newsletters, internal newspapers, video conferencing, brainstorming, mentoring, competency and performance assessments, big data management systems, informal conversations, knowledge mapping, teamwork culture, adoption of best practices, peer review, expert systems, lessons learned, coaching, electronic discussion forums, intranet use, telephone directories, creative spaces, staff mobility across teams and

activities, handbooks or manuals, blogs, wikis, and business process management (BPM) systems are comparatively less prevalent.

Karsen (2018) examines the existing knowledge management (KM) practices within an IT consulting company, analysing current challenges, and proposing the design of a KM system to address identified gaps. The study applies the Socialization - Externalization - Combination - Internalization (SECI) model to explain how knowledge is acquired and transformed within the organization. Building on this framework. Several approaches have been identified in the literature that follow the SECI model (Baradari et al., 2023; Karsen, 2018; Sadri et al., 1999; Tingwei et al., 2018), as illustrated in Figure 1.

Figure 1

Processes in KM Lifecycle

Processes in KM Lifecycle	Storage or retention - Transfer or diffusion - Application or use
	Creation - Retention - Transfer
	Capture- Elaborate- Transfer- Storing- Share
	Creation – Accumulation – Sharing – Utilization – Internalization
	Creating- Gathering- Organizing- Storing-Diffusing – Using - Exploitation
	Identification and capture – Creation - Classification and storage - Circulation and distribution- Application
	Creation-Storage- Distribution- Utilization
	Creation or acquisition- Storage- Dissemination or transfer- Application
	Capturing- Describing-Organizing-Sharing
	Creation- Storage- Transfer
	Capture- Store- Share-Use
	Creation- Internalizations- Acquisition- Refinement- Utilization
	Capture- Share-Develop-Use

Svetsky et al. (2019) sought to identify gaps in software support for knowledge workers within knowledge-based organizations, particularly in the transfer and exchange of knowledge. Their study compared existing practices with state-of-the-art KM software, emphasizing the critical role of information systems (IS) in managerial decision-making. By focusing on the extraction of key data from organizational IS, the study proposed advanced KM software designed to process knowledge, information, and data according to the hierarchy of data–information–knowledge–wisdom (DIKW), thereby mirroring the way knowledge workers and individuals naturally conceptualize information.

Building on this perspective, Sundaresan and Zhang (2022) investigated the role of artificial intelligence (AI) in facilitating knowledge sharing and organizational learning, while also examining the redesign of AI-enabled roles and processes for knowledge workers. Their study advocates linking KM activities with systems thinking and organizational strategies, categorizing KM into three core activities: knowledge creation and acquisition, knowledge sharing and transfer, and knowledge learning and application. AI functions: learning, understanding, reasoning, and interacting are found promising to enhance prediction capabilities and improve the performance of crowdsourcing platforms.

Table 2
IT Tools for KM

KM Tools	Employed	In Plan	Not in Plan
Company Intranet	89	11	0
Data Mining and Knowledge Tools	34	21	45
Document Management Systems	70	30	0
Groupware	24	54	22
Data Repositories	9	62	29
AI/ BI	4	18	78
Extranet	22	35	43
Teleconferencing/Videoconferencing	27	18	55
Workflow Management	0	10	90
Company blogs	53.25	4	
Cloud computing	52.31	5	
Grid computing	20.78	8	

Jamal and Narumon (2019) highlight the difficulties associated with managing tacit knowledge and propose categorizing it into distinct knowledge types as a means of facilitating effective externalization and measurement. Their study emphasizes the value of tools and transformation mechanisms that enable organizations to utilize tacit knowledge effectively. Such practices are considered essential for building core competencies and fostering value co-creation through both formal and informal learning. Among these mechanisms, communities of practice (CoPs) emerge as a particularly significant approach, consistently identified across multiple studies as a cornerstone of modern KM practice (Agnes et al., 2023; Aprirashka et al., 2019; Jamal & Narumon, 2019; Jarrahi et al., 2021; Rostamy et al., 2015; Sadri et al., 1999; Sundaresan & Zhang, 2022).

KM Critical Success Factors (KM - CSFs)

Aratthanage and Wijekoon (2023) evaluated the impact of organizational knowledge management systems (KMS) on the psychological well-being of employees in large-scale private IT organizations in Sri Lanka. Their study found that insufficient knowledge contributes to frustration in professional life, highlighting the need to address knowledge gaps within the IT sector. The implementation and effective use of KMS functionalities were shown to help stabilize employee's mental health conditions, thereby offering professional benefits. The study further emphasizes that the quality of KMS is critical: poorly designed systems can create inconsistency and confusion, whereas high-quality systems support organizational goals and business objectives. From a business perspective, maintaining a robust KMS establishes a sustainable mechanism for the efficient creation, storage, retrieval, and distribution of knowledge. Findings also suggest that key KMS quality parameters are linked to psychological well-being, though the relationship is nonlinear. Moreover, these parameters are associated with both software quality dimensions and employees' psychological characteristics.

Rostamy et al. (2015) emphasize that Critical Success Factors (CSFs) are essential for business growth and for achieving managerial objectives. Their study highlights that CSFs are fundamental to the success of knowledge management (KM), as they ensure organizational competitiveness through the integration of human, structural, and technological dimensions. Tingwei et al. (2018) provide a comprehensive theoretical review of KM, analysing key domains such as KM processes, knowledge sharing, and performance measurement techniques.

In a similar vein, Agnes et al. (2023) investigate the adoption approaches and CSFs for implementing KM and knowledge management systems (KMS) within small and medium-sized enterprises (SMEs).

Their findings reveal that the five most utilized tools in SMEs are training, meetings, knowledge-sharing sessions, repositories, and research activities. The study further identifies critical success factors for KM/KMS adoption (see Table 3), including organizational culture, the quality of knowledge, effective communication across organizational units, and teamwork. Additionally, the authors propose that employee experience and competencies should be considered as supplementary CSFs. Collectively, these factors contribute to the development and strengthening of intellectual capital, thereby enhancing organizational competitiveness.

Table 1

KM/KMS CSFs

Entity	Factors
Organizational	Top management commitment to support KM adoption, Organization structure and flexibility, Organization culture towards KM adoption, best practices, and benchmarking towards another organization for KM adoption
Strategy	Planning strategic of KM, General definition of knowledge within the organization, Change management strategy after KM adoption
Resource	Cost Factors for KM adoption which includes the availability of human resources (Teams that will implement the process of KM Adoption, the availability of infrastructure resources that will be needed for KM Adoption), the quality of the knowledge
People	Communication within and across all the business units in the organization, Team works within and across the areas in the organization, Resistance towards change (KM Adoption in the organization), Employee experience, Employee competency

Case Studies: Deloitte, Indian IT Industry, IBM, and Infosys

The following four case studies collectively illustrate the evolving landscape of knowledge management (KM) across diverse organizational contexts, highlighting both challenges and innovative practices (Deloitte, 2020; Chugh & Bhadoria, 2021; IBM; AWS, 2023). Deloitte's global survey reveals a significant readiness gap, with most organizations recognizing the importance of knowledge creation yet lacking the workforce preparedness, incentives, and infrastructure to act on it. This underscores the need for KM to be reframed as a driver of innovation and organizational resilience rather than a narrow process of information dissemination. The Indian IT industry demonstrates how technology serves as a critical enabler of KM, particularly in software development, where tools such as document management systems, expert networks, and cloud computing enhance knowledge capture, storage, and contextualization. However, the findings emphasize that technological infrastructure alone is insufficient; KM success requires balancing organizational culture, behavioural practices, and IT capabilities. IBM's approach reinforces this integration by embedding learning into organizational culture, rewarding knowledge sharing, and fostering communities of practice. Through its AI-powered Watson platform, IBM showcases how advanced KM systems can streamline onboarding, improve access to critical information, and enhance customer self-service, thereby reducing costs and increasing efficiency. Infosys extends this trajectory by leveraging AWS infrastructure to support enterprise-wide agile adoption and value co-creation. Its platforms - Wingspan, living labs, and digital innovation centres demonstrate how hybrid learning, automation, and experimental ecosystems can address workforce skill gaps, foster collaboration, and accelerate innovation. Taken together, these cases suggest that successful KM requires a holistic alignment of technology, organizational culture, and workforce development, with AI and cloud-enabled platforms acting as accelerators of collaboration, agility, and sustained competitive advantage.

Discussion

The case studies from Deloitte, the Indian IT industry, IBM, and Infosys collectively illustrate the evolving role of knowledge management (KM) across diverse organizational contexts. Deloitte's global survey highlights a significant readiness gap, with most organizations acknowledging the importance of knowledge creation yet lacking the workforce preparedness, incentives, and infrastructure to act on it. The Indian IT industry demonstrates how technology enables KM processes in software development, though success depends on balancing IT tools with organizational culture and behavioural practices. IBM reinforces this integration by embedding learning into organizational culture, rewarding knowledge sharing, and leveraging AI-powered platforms such as Watson to streamline onboarding, improve access to critical information, and enhance customer self-service. Infosys extends this trajectory by utilizing AWS infrastructure to support enterprise-wide agile adoption and value co-creation, highlighting how hybrid learning platforms, living labs, and innovation centres can address workforce skill gaps and accelerate collaboration. Together, these cases emphasize that KM must evolve beyond information dissemination to become a driver of innovation, agility, and organizational resilience.

The research further indicates that KM objectives differ across organizations, reflecting unique strategic priorities. However, findings do not conclusively demonstrate whether a standardized KM framework could resolve workforce readiness gaps. Instead, multiple theoretical models have emerged, identifying key factors driving KM/KMS and their correlation with organizational performance. These insights suggest the potential for unifying KM practices into a technology-supported framework that leverages human-AI collaboration. Emerging technologies, particularly AI and data analytics, have transformed KM from static repositories into dynamic systems capable of co-creation, contextualization, and predictive insights. By integrating infrastructure, culture, and incentives, AI-powered platforms enable organizations to identify skill gaps, personalize training, and automate performance measurement, thereby reducing managerial burden and enhancing workforce readiness.

Despite these advances, the findings highlight a critical gap in KM governance. According to PMI, effective governance is essential for IT projects to monitor, reform, and reinforce systems for budgeting and efficacy. Yet, there is limited evidence of governance strategies tailored to KM, particularly in the context of automation and AI. This raises questions about how KM/KMS performance can be measured against new critical success factors (CSFs), such as evolving technology demands, rapid market dynamics, and complex KM ecosystems. Nakash and Bouhnik (2022) emphasize the disconnect between academic research and industry practice, warning that KM risks being perceived as obsolete unless revitalized through strategic alignment. A dedicated governance model is therefore needed to ensure accountability, adaptability, and profitability. Such a model would involve expert facilitators overseeing KM programs, verifying system upgrades, balancing personalized and mandatory training, and integrating AI-driven processes to enhance efficiency and performance measurement.

Finally, the role of leadership and specialized coaching emerges as a cornerstone of effective KM. Organizations increasingly expect advanced skills such as innovation, critical thinking, collaboration, and emotional intelligence alongside technological expertise. Training and continuous learning are thus central to KM, but they require navigators, mentors or coaches to guide employees strategically and ensure alignment with organizational objectives. This mentoring dynamic reflects spatial cognition, where leaders observe internal and external environments and localize actions to situational demands (Gillett & Richard, 2019). As KM enters a new era, AI and machine learning are beginning to function as navigators in large IT organizations, complementing human leadership. The integration of coaching with AI-driven guidance ensures that workforce development remains adaptive, strategically aligned, and resilient, enabling organizations to sustain innovation and competitive advantage in rapidly changing environments.

Conclusion

The discussion across multiple sources in the IT domain emphasizes that knowledge management (KM) practices must be aligned with organizational strategy and industry-specific requirements to enable value co-creation and competitiveness. Knowledge workers play a central role in this process, with their capabilities elevated to desired maturity levels through varied practices. The findings demonstrate that people-based KM, when complemented by plan-based KM, ensures organizational success. Critical success factors (CSFs) for KM performance measurement and key challenges identified in theoretical models and case studies further reveal that KM adoption remains limited, often confined to top IT leaders, thereby contributing to organizational struggles in achieving success.

This multi-vocal literature review (MLR) thoroughly investigated the necessity of KM practices, existing frameworks, and KM dimensions through varied models, assessing their suitability and challenges from an organizational perspective. The findings indicate that KM/KMS often receive limited attention or are absent in many organizations, resulting in missed opportunities and benefits. Hypothetical models must be brought to light to help organizations understand the importance of KM and its key driving factors, thereby encouraging adoption for organizational advantage. The predominance of journal articles from the management stream also reinforces the strong link between KM and business process management.

Additionally, this research highlights the need for further investigation through qualitative approaches such as surveys and feedback from well-established organizations practicing agile methodologies. Such inquiry could uncover advanced KM practices with potential applicability for SMEs, depending on their maturity and budget. KM has consistently been identified as an essential pillar for enhancing competitiveness and market potential, particularly through the contributions of a skilled workforce. Employees must not only remain current with techno-functional and business skills to achieve agility but also demonstrate readiness to adopt emerging technologies such as AI for coding and customer service, or digital twins for accelerating IT training, business planning, and product delivery.

The proposed integration of advanced technologies into existing KM frameworks requires further research to address design complexities and evaluate performance outcomes. By embracing AI, data analytics, and other hi-tech infrastructures, organizations can strengthen decision-making, improve performance measurement, and close knowledge gaps. Ultimately, KM must evolve into adaptive, technology-enabled frameworks that unify organizational processes, empower knowledge workers, and sustain competitiveness in rapidly changing markets.

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