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Knowledge Management in Today's World: Exploring the influence and impact towards creativity and innovation

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Abstract

Knowledge Management (KM) is crucial for the success and longevity of organisations. This article aims to provide literature reviews focusing on how KM practices impact creativity and innovation within organisations. Some key drivers identified include technology integration, organisational culture, and leadership support. This article addresses the challenges of implementing KM practices and provides actionable recommendations to overcome these barriers. Ultimately, the study highlights KM as a vital tool for organisations to develop their creative capabilities and stay innovative in a competitive market by utilising knowledge effectively to drive future ideas and processes.

Keywords: knowledge management, creativity and innovation, leadership support, technology integration

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1.0 Introduction

In the era of globalisation, technological changes require faster adaptation. Knowledge, the ability to adapt to changing conditions, is now considered the most valuable and important tool for creating sustainable competitive advantages. The solution to exchange and growth is understanding, sharing ideas, and developing various new innovative methods to stay ahead of the competition. Learning, innovation, and practices are involved in enhancing standards and execution. As we all know, the business environment in the 21st century is changing rapidly. Persistence and triumph depend entirely on the ability of organisations to adapt to changing business circumstances. Information technology transformation has created a divergence in the retrieval and management of information and knowledge.

Knowledge is vital to enhance the firm's exploration and exploitation capabilities. Hence, each company needs to be concerned about how knowledge is managed to get the best out of it. That is why the role of KM becomes very significant. KM refers to organising, creating, using, and exchanging collective knowledge within an organisation. Successful KM includes keeping information in the area where it is convenient to access. KM is the newly developed knowledge that defines an organisation and helps it to outsmart competitors (Saadon, 2023). This denotes the long-term possession of knowledge because it is being profitably and effectively employed by the

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company. KM in the organisation can be used as a process that monitors the largely implicit and dynamic activity of critical knowledge and its associated activities of creating, gathering, organizing, diffusion, use, and exploitation (Priyardarshi, 2022). For example, KM is that section of the organisation's internal processes in which knowledge is brought into, developed, formalised, and applied (Shujahat et al., 2017). Further study characterised KM as a knowledge creation, distribution, and utilization process in an organisation, to meet the objectives with intellectual property and knowledge-based assets (Erkollar et al., 2020).

The main global challenge in management practices is the identification of knowledge, the creation, innovation, dissemination, and development of talent. The parameters of economic competition have undergone significant changes in recent years due to the driving force of globalisation, the spread of information technology, the accessibility of information, and the varying character of organisational forms

KM practices refer to acquiring, storing, understanding, sharing, and putting into practice knowledge. These activities are conducted in the organisational learning process concerning the organisation's culture and strategies (Kiessling et al., 2009). It also proposed that KM is positively impacts organisational outcomes in the form of the firm's innovation, product improvement, and employee improvement. Additionally, other research has shown that KM has a good constructive direct impact on organisational performance.

2.0 Literature review

Ginja Antunes & Pinheiro (2019) explore the relationships among KM, organisational learning, and organisational memory through the empirical findings of this research. It updates the existing research literature from 1960 to 2017 on how knowledge and learning processes enable the organisation to develop its memory. The paper puts forward that formal organisational learning is a dynamic process in which the individuals' ability to create, exchange, and use knowledge forms one of the key building blocks. It argues that human resources, in terms of their development of intellectual capital, are a central driver in the transformation of organisations, through KM practices, as this in turn drives higher levels of innovation and strategic decision-making. The literature study extended from a wide range of literature from the multiple decades between 1960 and 2017 and uses a vast sample of over 2,500 articles, creating a solid theoretical context for knowledge development. The article defines and distinguishes key concepts like KM, organisational learning, and organisational memory, creating well-defined connections among them. The focus on how Human Resource Management (HRM) practices and teamwork promote knowledge sharing and drive innovation offers practical guidance for professionals. This article offers a solid theoretical foundation for grasping the relationship between KM, organisational learning, and memory. Its systematic review method enhances its value as a resource for bringing together existing knowledge. However, the paper lacks empirical evidence, rendering it more theoretical than practical. Additionally, it leans heavily on generalizations, which could restrict its relevance to organisational settings.

It has been identified that transformative trends are shaping the future of work, influenced by technology, climate change, and demographic shifts (Jiang et al., 2024). It highlights how innovative knowledge can empower individuals and organisations to succeed in complex and dynamic environments. Innovative knowledge is described as the combination of existing and new insights to tackle challenges creatively. The authors call for more research into the intersection of KM and innovation to better prepare for the changing work landscape.

The article is timely and relevant, focusing on the future of work and the essential role of innovative knowledge. It identifies key challenges and opportunities but tends to remain theoretical. The absence of empirical research or specific examples diminishes its practical relevance. Furthermore, the article does not provide concrete strategies for nurturing innovative knowledge. It thoroughly covers various topics, including digital innovation, employee creativity, career interests, and the influence of personality on knowledge sharing. This wide scope ensures its relevance across various disciplines and industries. Diverse conceptual frameworks thrive as a mediator between knowledge sharing and innovative behaviour, and introduce new theoretical discussions. For instance, practical recommendations toward creating thriving workplace, such as increased supervisor transparency and the movement toward technology-driven training, are well-argued and feasible. Most studies, like Brown's (2017) study on the impact of automation on pilots, incorporate diverse fields such as psychology, technology, and organisational behaviour. This, therefore, adds to the strength of their implications.

This empirical study by Ode & Ayavoo (2019) further examines the influence of KM practices in knowledge creation, storage, dissemination, and application on innovation in service firms in Nigeria. It identifies knowledge application as a crucial enabler that strengthens the relationship of KM with innovation. Structural Equation Modelling (SEM) identifies and establishes how knowledge management practices ensure innovation effectiveness, directly and indirectly. Therefore, it successfully weaves theoretical insights with empirical findings into a clear framework on how KM practices promote innovation through the application of knowledge. The focus on developing countries addresses a notable research gap. Nonetheless, its focus on service firms may limit the broader applicability of the findings. Using SEM to analyse data from 293 service firms in Nigeria enhances both the credibility and relevance of the study in developing economies. The contribution of this article thus enriches the theory of KM by introducing a fresh perspective that positions knowledge application as a mediator and illustrates its practical implications in driving innovation. A focus on service firms also extends the KM discourse beyond its traditional preoccupation with manufacturing.

Moreover, the study of Yousaf et al., (2018) analyses the influence of KM practices, represented by knowledge acquisition, dissemination, and responsiveness, on service sector innovation in Pakistan. Through the partial least square approach of structural equation modelling, the evidence showed that knowledge management influences innovation outcomes significantly, with knowledge dissemination playing a vital role. This study provides substantial empirical evidence to link knowledge management and innovation in the context of a developing country. It has been effective in underlining the interdependence of various knowledge management components. However, the findings are limited to the services sector in Pakistan alone, which may limit the extrapolation of the findings

to other sectors and regions. Similarly, the research focused on Pakistan, a significant gap in KM studies within developing nation contexts, particularly South Asia. It also holistically integrates three dimensions of KM knowledge acquisition, dissemination, and responsiveness into a coherent model about innovation outcomes. The application of structural equation modelling enhances the robustness of its findings, while the focus on the interconnectedness of KM components adds depth to the discussion.

3.0 Methodology

This article uses empirical validation to evaluate how KM practices contribute to promoting innovation in organisations. Case studies were selected for empirical validation to guarantee a thorough comprehension of KM practices and their influence on innovation. This method enables a thorough examination of specific cases and facilitates broader comparisons across various situations. Case studies of successful organisations from 2018 to 2024, KM practices were chosen to offer practical examples and confirm the theoretical results. These case studies demonstrate the practical uses and results of knowledge management strategies. A study was carried out to compare KM practices and their effects on innovation in different industries and regions. The objective of this analysis was to discover patterns and specific elements that contribute to successful KM implementation.

4.0 Finding

The results of this research highlight the important function of KM in improving creativity and innovation in companies. A few significant discoveries are that knowledge management practices significantly boost innovation by aiding in generating, distributing, and utilizing knowledge. KM is crucial for organisations to thrive and remain competitive by fostering creativity and innovation. Successful KM involves utilizing technology, promoting a knowledge-sharing culture, and receiving strong leadership backing. By aiding in the creation, sharing, and utilisation of knowledge, KM practices significantly boost innovation.

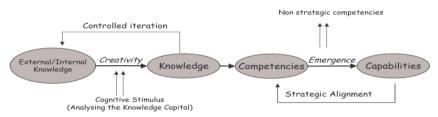


Fig. 1: Knowledge Evolution Model (Source: Extracted from the journal Creative and Knowledge Management, Saulais et al., 2012)

The study also discusses challenges in implementing KM, like converting tacit knowledge to explicit knowledge and controlling knowledge flow. It also points out the lack of empirical evidence on how KM impacts innovation and career advancement. Customized KM strategies are essential for developing countries to enhance innovation, particularly in service industries.

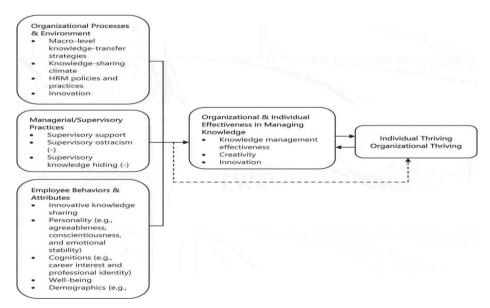


Fig. 2: An illustrative model of enabling individual and organisational thriving in knowledge management contexts (Source: Thriving in Future Work: Knowledge Management and Innovation Perspectives, Jiang et al., 2024)

KM is crucial for addressing upcoming workforce obstacles, promoting a mindset of ongoing education, and facilitating innovative solutions. These results emphasize the importance of knowledge management in fostering creativity and innovation in companies, offering theoretical understandings and practical advice for successful execution.

5.0 Discussion

The creation and application of new knowledge are fundamental to innovation, highlighting the close relationship between the two. Organisations hold knowledge as an intangible asset and should facilitate sharing across different departments and even with other organisations. By merging knowledge and ideas from internal and external sources, they can generate new insights built on existing knowledge. Knowledge is viewed as a vital and transferable resource crucial for fostering innovation. Consequently, effective innovation management systems should enhance KM, ensuring that knowledge is readily accessible and easily transferable.

KM and innovation are closely intertwined, with effective KM at both the team and organisational levels catalyzing significant innovations that can elevate performance. KM plays a crucial role in fostering innovation. It lays the groundwork for knowledge sharing and collaborative problem-solving while linking internal and external knowledge to spark innovative ideas, tools, and methods.

KM enhances innovation in several ways, including improved performance by systematically analyzing our work to scale effective practices and develop new innovative strategies for areas that need improvement. Arif and Rahman (2018) stated that businesses create, distribute, and oversee their intellectual property through KM. It entails assisting knowledge workers by establishing a setting that permits, promotes and regulates knowledge-sharing. Meanwhile, in the nursing sector, applying KM can enhance nursing care. Among the advantages include efficiently attending to the needs and expectations of patients, minimizing expenses while making effective use of resources as well as coordinating departmental procedures, monitoring advancement, correcting mistakes, and adjusting to changing workflows (Karamitri et al., 2017). Its enhanced implementation of innovations allows innovators to continuously refine their work, ensuring that innovations are better suited to their operational contexts and meet the needs of the individuals and communities they aim to benefit. Consequently, KM can facilitate the transition of innovations from pilot phases to regular practice. Greater openness to innovation, helping organisations become more receptive to new ideas and approaches. Moreover, it expanded the knowledge base, as KM assists organisations in increasing the volume of knowledge they possess. By enhancing better decision-making with KM, an organisation can make much better decisions by recognizing the proper value of its intellectual assets.

Groundbreaking discoveries in larger KM applications frequently centre on exploiting emerging technology and tactics to improve the accessibility, sharing, and exploitation of organisational information. Artificial intelligence (AI) and machine learning (ML) have transformed KM by providing enhanced data analytics, tailored suggestions, and automated knowledge retrieval, making information more actionable. For example, AI-powered technologies like IBM Watson have been used in healthcare to evaluate large amounts of clinical data and medical research, allowing for faster and more precise decision-making (Duan et al., 2019).

Collaborative platforms and cloud-based technologies have changed how knowledge is exchanged among geographically distributed teams, promoting real-time collaboration and creativity. Microsoft Teams and Slack are popular tools for efficient communication and document sharing in hybrid and remote work environments (Marín et al., 2020).

The integration of natural language processing (NLP) with semantic technologies has improved knowledge organisation as well as contextualization and bridging the gap between tacit and explicit information. For example, NLP-powered platforms such as Kira Systems are widely utilized in the legal profession to analyse contracts, extract critical provisions, and execute due diligence activities, significantly decreasing manual effort (Tan et al., 2020). Semantic technologies also support enhanced search capabilities, allowing computers to grasp user intent instead of depending exclusively on keyword matching. This has proved helpful in platforms like Amazon's Alexa and enterprise-level KM systems.

KM, organisational learning, and memory are mutually reinforcing parts that help an organisation maintain its competitive advantage (Ginja Antunes & Pinheiro, 2019). The optimization of knowledge thus requires an approach that emphasizes the human aspects of organisations. Managers will be well advised to integrate these processes within their strategic goals as well as to foster innovation and increase efficiency. The study has therefore established a theoretical framework of KM and how it relates to learning and memory. However, it could further develop empirical evidence to support its assertions. Emphasis on HRM outlines an important dimension for practical applications that link theories to strategies that can be employed in reality.

KM and innovative knowledge are imperative for solving the challenges of the future workforce (Jiang et al., 2024). Nevertheless, many research gaps still exist about how KM affects innovation or career paths. A knowledge-driven approach is key to resiliency and agility in organisations. While the article gives enough reasons to believe in the importance of innovative knowledge, it fails to give any empirical data to substantiate its statement. It provides a theoretical framework for future studies in this line and underlines the practical implications of KM to handle challenges. However, its emphasis on theoretical frameworks limits its usefulness.

Applying knowledge effectively is crucial to turning KM practices into real innovation results (Ode & Ayavoo, 2019). The competitive advantage in developing nations' companies needs to concentrate on KM practices. It makes a compelling argument with empirical data that may be particularly helpful for developing countries as customized KM strategies will significantly improve innovation performance, mainly in service-oriented sectors. It focuses on the knowledge of application and deduces practical implications for companies concerning developing innovation capabilities. Its findings may not be found widely because it has focused narrowly on service firms.

Effective implementation of KM strategies is critical for encouraging innovation in countries that are still developing (Yousaf et al.,2018). The components of knowledge management are interrelated, with each playing an important role in achieving innovative solutions. To fully realize their innovative potential, organisations must adjust their knowledge management strategies to their specific settings. The study significantly contributes to understanding KM's role in developing economies, offering practical insights for

organisations. Its empirical approach enhances the credibility of its conclusions. However, the emphasis on the service sector might restrict the relevance of its findings to other industries.

KM frameworks or tools are not simply executed in the company and are expect to enjoy lasting benefits. The business circumstance is highly tense and fractious. Clients quickly to switch providers if their purchasing experience falls short, and competitors are always ready to capitalise on first-mover advantages and take advantage of their rivals' missteps. These factors compel companies to think creatively and seek better or even groundbreaking solutions. Regarding knowledge-based training methods, it is recommended that the organisation dynamically plan and organize courses, seminars, and other training related to the work context and needs of its employees, as the main task of human resources management is to evaluate and analyse the educational needs of the staff in organisations.

Since knowledge is primarily tacit and personally held, it poses challenges in managing and controlling its flow. The literature review indicates that a key aspect of KM is converting tacit knowledge into explicit information, which can enhance the ability to manage and control knowledge more effectively. However, a significant issue that remains largely unexplored and requires further investigation is how the process of translating tacit knowledge into explicit knowledge functions. The lengthy process of turning knowledge into innovative activities often means that the benefits of innovation do not offset the costs in the short term. Additionally, when some companies struggle to apply knowledge effectively, it can negatively affect their ability to adapt to environmental changes and their overall innovation performance.

6.0 Conclusion & Recommendation

KM is of immense value in today, as KM strategies can significantly foster creativity, innovation, and operational efficiency. A systematic policy of information sharing and applications will assist in institutionalizing a culture of continuous learning within the organisation and aid in creative problem-solving and inventive solutions. Organisations utilize group intelligence by integrating this modern software with collaboration tools, further sharpening their decision-making and competitive advantages.

However, all assert that technology sector is experiencing rapid innovation in various sectors requiring tailor-made approaches, as knowledge quickly becomes outdated. Hence, the importance of KM is toward the continuous upskilling of employees and steady product development. Advanced knowledge-sharing platforms and Al-driven tools are increasingly promoted as keeping businesses in the game. In the medical areas of the healthcare sector, KM can ensure that sensitive and constantly evolving medical knowledge is appropriated on real-time information sharing and cooperation between practitioners. Secure KM systems and teamwork are pivotal in increasing patient outcomes. Staff turnover and high demand for consistency in the quality of service also demonstrate various dimensions of KM, which is important for preserving institutional memory and inducting new employees. A user-friendly tool with well-documented procedures can ensure business continuity. As alterations happen in learning needs and the incorporation of technology in teaching, KM must adopt collaborative learning and flexibility in the curriculum. Digital repositories and knowledge-sharing are recommended for adaptive curriculum development. In the public sector, KM can help eliminate bureaucratic inefficiencies and build public trust, fast-track the seamlessness in processes, and enhance the delivery of services. Knowledge repositories for standardization and practices of transparency are volunteered to increase citizen engagement.

In the time to come, KM will take an even bigger role in bringing together organisations so that they can thrive and survive in the increasingly complex and dynamic environment. Innovation is creating something could be long-term sustainable growth to withstand future shocks. On the other hand, the author proposes KM as a possible avenue to ameliorate organisational performance and its integration with human resource development to fulfill commercial and institutional aims and objectives.

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Paper Contribution to Related Field of Study

This article contributes to the field of Information Management as described in the introduction.

References

Arif, F. N. T., & Rahman, S. A. (2018). Knowledge management and job satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 8(9). https://doi.org/10.6007/ijarbss/v8-i9/4589

Brown, J. P. (2017). The effect of automation on human factors in aviation. The Journal of Instrumentation Automation and Systems, 3(2), 31–46. https://doi.org/10.21535/jias.v3i2.916

Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of Big Data – evolution, challenges, and research agenda. *International Journal of Information Management*, 48, 63–71. https://doi.org/10.1016/j.ijinfomgt.2019.01.021

Erkollar, A., Darow, A., & Zulechner, I. (2020). Lesson ticker: Knowledge Management. In *Tectum – ein Verlag in der Nomos Verlagsgesellschaft eBooks* (pp. 311–316). https://doi.org/10.5771/9783828872301-311

Ginja Antunes, H. D. J. G., & Pinheiro, P. G. A. (2019). Linking knowledge management, organisational learning, and memory. *Journal of Innovation & Knowledge*, 5, 140–149. https://www.journals.elsevier.com/journal-of-innovation-and-knowledge

Jiang, Z., Huo, M., Jones, J., Cheng, Z., Manoharan, A., & Spoehr, J. (2024). Thriving in future work: knowledge management and innovation perspectives. *Knowledge Management Research & Practice*, 1–12. https://doi.org/10.1080/14778238.2024.2344347

Karamitri, I., Talias, M. A., & Bellali, T. (2017). Knowledge management practices in healthcare settings: a systematic review. The International Journal of Health Planning and Management, 32(1), 4–18. https://doi.org/10.1002/hpm.2303

Kiessling, T. S., Richey, R. G., Meng, J., & Dabic, M. (2009). Exploring knowledge management to organisational performance outcomes in a transitional economy. Journal of World Business, 44(4), 421–433. https://doi.org/10.1016/j.jwb.2008.11.006

Marín, J. A., García, E., & Díaz, E. (2020). Knowledge sharing and collaboration in virtual environments: A review. Computers in Human Behaviour, 110, 106396.

Ode, E., & Ayavoo, R. (2019). The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. *Journal of Innovation & Knowledge*, 5(3), 210–218. https://doi.org/10.1016/j.jik.2019.08.002

Priyadarshi, P. (2022). Network Nirvana: Managing Knowledge in the Postmodern Organisation. Deleted Journal, 9(1), 61-69. https://doi.org/10.57198/2583-4932.1174

Saadon, R. (2023). Knowledge Management in Mauritian Civil Service Organisations: An Empirical Analysis. *Russian Law Journal*. https://doi.org/10.52783/rlj.v11i4s.816.

Saulais, Pierre & Ermine, Jean-Louis. (2012). Creativity and Knowledge Management. VINE. 42. 10.1108/03055721211267521.

Shujahat, M., Sousa, M. J., Hussain, S., Nawaz, F., Wang, M., & Umer, M. (2017). Translating the impact of knowledge management processes into knowledge-based innovation: The neglected and mediating role of knowledge-worker productivity. *Journal of Business Research*, 94, 442–450

Tan, C. W., Pan, S. L., & Lim, E. T. (2020). The transformative potential of digital technology in knowledge-intensive service work: The case of legal work. *Journal of Strategic Information Systems*, 29(1), 101620.

Yousaf, Muhammad & Ali, Q. (2018). Impact of Knowledge Management on Innovation: Evidence from a South Asian Country. *Journal of Information & Knowledge Management*. 17. 1850035. 10.1142/S0219649218500351.