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Overview of Knowledge Management Approach in the Use of E-Learning Platform to Enable Lecturers to Achieve Globalisation Level

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ABSTRACT

A critical aspect of business management is the successful creation of processes that drive to reach this goal, establishing an approach of knowledge management (KM) strategy may be considered the best way to channel the Higher Educational Institution's (HEIs) efforts to achieve sustainable development goals (SDG). This is a continuous flow of innovation, to give a basis for competitive advantage. Knowledge management is understood in a wide sense as a process of overall change in the organization, focused on competitive advantage, and especially related to the lecturer's performance. The main purpose of this research is to identify the implementation of a knowledge management approach in the use of e-learning platforms among staff in Higher Educational Institution (HEIs) and analyse the impact on lecturer's performance to achieve sustainable development goals (SDG) in the context of education 4.0. The research methodology employed in this study relies on secondary data from reputable journals and proceedings. Therefore, based on previous literature, we developed a hypothesis of a knowledge management approach in the use of an e-learning platform. The Impact of this research is KM was the method which made possible the essential strategic goal towards lecturer performance to achieve globalisation level.

Keywords: Knowledge management, e-learning platform, Higher Educational Institution (HEIs), competitive advantage, Sustainable Development Goals (SDG).

INTRODUCTION

Malaysia's knowledge economy refers to an economic model that emphasizes the generation, dissemination, and application of knowledge as key drivers of economic growth and development. The goal of this shift to a knowledge-based economy is to use innovation, technology, and intellectual capital to boost competitiveness, productivity, and sustainable development in a number of industries. The National Higher Education Strategic Plan (PSPTN) 2015-2025 is a well-known document that demonstrates Malaysia's dedication to creating a knowledge economy. Malaysia's goal to make its higher education system more globally competitive and in line with the needs of a knowledge-based economy is laid out in this strategic plan. It places a strong emphasis on projects including raising R&D spending, encouraging industry-academia cooperation, improving research and education standards, and encouraging entrepreneurship and innovation. Knowledge Management (KM) plays a critical role in enhancing e-learning practices, offering numerous benefits that improve the quality, accessibility, and efficiency of educational experience. KM ensures the development of a centralized repository of knowledge resources.

E-learning platforms can provide individualized learning experiences through efficient knowledge management. Customized learning paths that meet the particular needs and learning preferences of each student can be created thanks to KM systems' ability to track each learner's progress, preferences, and performance (Ejdys, 2021). Knowledge management facilitates the effective arrangement and retrieval of data. Learners can discover the information they need quickly and efficiently by utilizing knowledge management (KM) tools such as content

management systems, search engines, and indexing strategies. This effectiveness is essential in e-learning, as the learning process can be greatly impacted by how simple it is to retrieve information (Azizi, et al., 2023). Knowledge management (KM) makes sure that important information is successfully transmitted and retained within an educational setting. This is especially crucial in situations where subject matter specialists or educators depart from the company.

Knowledge management (KM) and e-learning (EL) are increasingly integrated to enhance educational processes and outcomes. Both KM and e-learning emphasize applying knowledge to solve real-world problems. In higher education, e-learning helps students apply theoretical knowledge through simulations, case studies, and practical assignments (Martin et al., 2019). In a KM system, this applied learning is crucial for organizational development and innovation. KM in e-learning supports innovative activities of lecturers and researchers, with various levels of implementation ranging from individual to global. This approach aims to streamline the transfer of educational content among stakeholders in e-learning environments. (Centobelli et al., 2019).

Globalization in education in term part of sustainability, this is characterized by the increasing interconnectedness of educational systems, where knowledge is shared across international boundaries, and students and educators engage in cross-cultural exchanges (Addo et al., 2022). To thrive in this globalized environment, lecturers must adapt to new teaching methodologies that are not only innovative but also culturally sensitive and inclusive. E-learning platforms, when underpinned by robust KM strategies, provide the necessary infrastructure to support these goals. The implementation of this e-learning as a method of knowledge management, is one of the objectives of achieving the Sustainable Development Goals (SDG) goals; that is, the current generations are encouraged to meet their economic, social, and environmental needs without constraining them for future generations. Hence, Higher Educational Institution have another important role in the SDG as a driver for the achievement of the full set of goals through their role in human formation, knowledge production, and innovation (Maia & Tristan, 2020). A major enabler to achieve these SDG is considered through education. Therefore, the term Education for Sustainable Development (ESD) emerged, which aims to incorporate sustainability values into all aspects of learning and thus foster re-thinking of existing practices and behavioural changes towards a more sustainable society.

LITERATURE REVIEW

Knowledge Management

E-learning enables employees to make learning a culture within an organization. However, for e-learning to be effective, the knowledge circulating in the organization must be properly managed (A. S. M. Zahari., 2024). Knowledge management (KM) is foundational to sharing and applying knowledge, which is vital for an organization's sustainability (A. S. M. Zahari., 2024). Knowledge management (KM) plays a crucial role in enhancing e-learning platforms and virtual learning environments (VLEs). The integration of KM in e-learning systems has shown positive impacts, including improved user satisfaction and knowledge processing (Romadhon et al., 2022). Cross-university collaboration platforms facilitate knowledge transfer in teaching, research, and transfer activities, often utilizing e-learning platforms (Doering et al., 2022). These platforms enable knowledge sharing, cooperation synergies, and increased visibility. The integration of KM and e-learning approaches in engineering education has proven effective in producing, disseminating, and sharing knowledge among students, academic teachers, and industry professionals (Aichouni et al., 2013). Overall, the implementation of KM in e-learning is considered a critical success factor in modern education systems (Romadhon et al., 2022).

E-Learning

E-learning, which includes all learning activities whether done synchronously or asynchronously, in groups or individually, is a type of education that uses electronic media (the letter "e") to enhance the teaching and learning process. E-learning, according to Naidu (2003), encompasses all educational activities conducted by individuals or groups utilizing standalone or networked computers and other electronic devices, either synchronously or asynchronously, online or offline. Technology-based media are referred to as electronic media in this context.

Face-to-face interaction is no longer necessary when using electronic media to enhance the learning process. Online education provides students with the flexibility of not needing to physically attend classes but instead fully utilizing online learning. Some institutions also adopt a "blended mode" approach, combining online and face-to-face instruction (Littlejohn et. al., 2021).

The Covid-19 pandemic has indeed had a significant impact on socioeconomics as well as the field of education worldwide (Rampal, 2020; Nambiar, 2020). Thus, since the global Covid-19 pandemic, e-learning has become a common concept to us (Finlay, Tinnion, & Simpson, 2022). Teachers and students have been obliged to perform their teaching and facilitation methods online due to this predicament. the dissemination of knowledge using digital platforms like Telegram, Zoom, WhatsApp, Google Meet, and others. Although there are many platforms accessible for conducting online learning, putting them into practice is more difficult than we may believe since there are limitations or difficulties that must be resolved (Ejdys, 2021).

Knowledge Management in E-learning: Empowering Lecturers for Globalization

The pursuit of globalization in higher education necessitates a strategic approach to knowledge management within e-learning platforms. By integrating knowledge creation, sharing, and utilization mechanisms, lecturers can transcend geographical boundaries and cultivate a global perspective in their teaching and research:

1. Knowledge Creation: Fostering a Global Knowledge Hub

E-learning platforms provide an ideal setting for knowledge creation beyond the walls of traditional classroom. As mentioned by Mailizar, Almanthari, & Maulina (2020), collaborative content development guarantees a global perspective and cultural relevance by having lecturers from different backgrounds to co-create for course materials. Moreover, discussion forums and knowledge bases foster dynamic knowledge exchange, enabling lecturers to tap into collective expertise and generate new insights, as highlighted by Azizi, et al., (2023).

2. Knowledge Sharing: Building Bridges Across Borders

E-learning facilitates seamless knowledge sharing across geographical boundaries. The promotion of open educational resources (OER) within e-learning platforms democratizes access to quality educational content, fostering a culture of knowledge sharing (Zhang, & Chen, 2018). Additionally, cross-cultural learning communities and virtual guest lectures by international experts enrich the learning experience and expose learners to global perspectives (Azizi, et al., 2023).

3. Knowledge Utilization: Empowering Lecturers for Global Impact

Effective knowledge utilization within e-learning platforms empowers lecturers to achieve globalization goals. Personalized learning paths, enabled by data analytics and adaptive learning technologies, cater to the diverse needs of learners across the globe (Drachsler, Pecceu, Arts, Hutten, Rutledge, & Stash, 2018). Furthermore, real-world problem-solving activities and opportunities for continuous professional development equip lecturers with the skills and knowledge to navigate the complexities of a globalized world (Al-Qahtani & Higgins, 2013).

E-Learning and Technology: Forging a Competitive Advantage for Lecturers

Lecturers who embrace e-learning and technology gain a distinct competitive advantage. These tools not only facilitate globalization but also empower lecturers to distinguish themselves in several key ways:

1. Enhanced Digital Literacy Skillset and Adaptability

Lecturers that are demonstrate proficiency in e-learning platforms, educational technologies, and digital communication tools showcase their commitment to continuous learning and adaptability, making them more attractive to adapt digital literacy effectively (McGorry, 2016). Phan, (2023) mention that by incorporating technology-enabled pedagogical approaches like flipped classrooms, gamification, and virtual simulations into

teaching and learning, demonstrates a lecturer's ability to create engaging and effective learning experiences, setting them apart from their peers.

2. Increased Visibility and Reputation via Global Networking and Collaboration

Lecturers that are actively participating in virtual conferences, webinars, and online communities allows them to connect with international colleagues, share their expertise, and build a global reputation, opening doors for future collaborations and opportunities (Bali & Pareek, 2017). Furthermore, by establishing a strong online presence through blogs, social media, or personal websites where lecturers share their insights and research findings can position them as thought leaders in their field, attracting attention from potential collaborators, employers, and students (Castañeda & Selwyn, 2018).

3. Career Advancement and Recognition

By embracing e-learning and technology can lead to new opportunities such as developing online courses, leading virtual workshops, or consulting on educational technology initiatives, all of which can boost a lecturer's income and career prospects (McGorry, 2016). For research and innovation activities, accessing advanced technology and global networks can facilitate groundbreaking research collaborations and the development of innovative teaching methods, increasing a lecturer's chances of securing grants, publishing in high-impact journals, and gaining recognition within their discipline (Silva-Laya et al., 2020).

RESEARCH METHODOLOGY

This research used qualitative methods that follow a methodology of analyzing secondary data from different sources such as reputable journals and proceedings. This method was examined and proved the existence knowledge management approach in the use of an e-learning platform The methodological approach used secondary data analysis to achieve the results presented in this paper. The analyses enable the development of a hypothesis of a knowledge management approach in the use of an e-learning platform.

RESULT & DISCUSSION

This study presents the results of this Literature Review (LR) in one main section: descriptive quantitative analysis.

Descriptive Quantitative

This section delves into the descriptive statistics of research trends on knowledge management focusing on e-learning platforms. As shown in Figure 1, all 2050 articles selected for this literature review (LR) were published between 2014 and 2024.

Research Trend by Year

Figure 1 shows the number of research activities (presumably publications, studies, or projects) across different years from 2014 to 2024. 2014; the research trend starts high with around 300 publications. This indicates a strong interest or activity in the subject during this year. 2015-2016; there's a significant drop in 2015 to approximately 150 publications, followed by a sharp decline in 2016 to just around 50. This suggests a decrease in research interest or available resources. 2017-2019; research activity increases again, peaking in 2019 with around 200 publications. This period shows a recovery in interest or funding for research. 2020; this year marks the highest point in the chart, with research activities spiking to nearly 450 publications. This could indicate a significant event or development in the field that prompted a surge in research. 2021-2022; after the peak in 2020, there's a decline in 2021 with around 300 publications, and a further decrease in 2022 to about 150 publications. 2023-2024; the downward trend continues, with 2023 showing around 100 publications and a sharp drop in 2024 to approximately 20. This may suggest a declining interest, resources, or a shift in focus to other

areas. This analysis could help in understanding the factors driving these trends, such as economic, technological, or policy changes impacting the research domain. The trends in research on the knowledge management approach in e-learning likely correlate with external factors such as technological progress, global events, funding opportunities, and shifting academic interests. Peaks in research activity reflect periods of heightened interest or urgency, while declines might indicate a maturing field or a shift in research priorities. In spite of that, significant advancements in technology, especially during the COVID-19 pandemic, led to an accelerated adoption of e-learning platforms. The necessity for remote teaching and learning likely spurred a spike in research as institutions sought to adapt quickly. Researchers may have focused on how knowledge management strategies could enhance the effectiveness of these platforms.

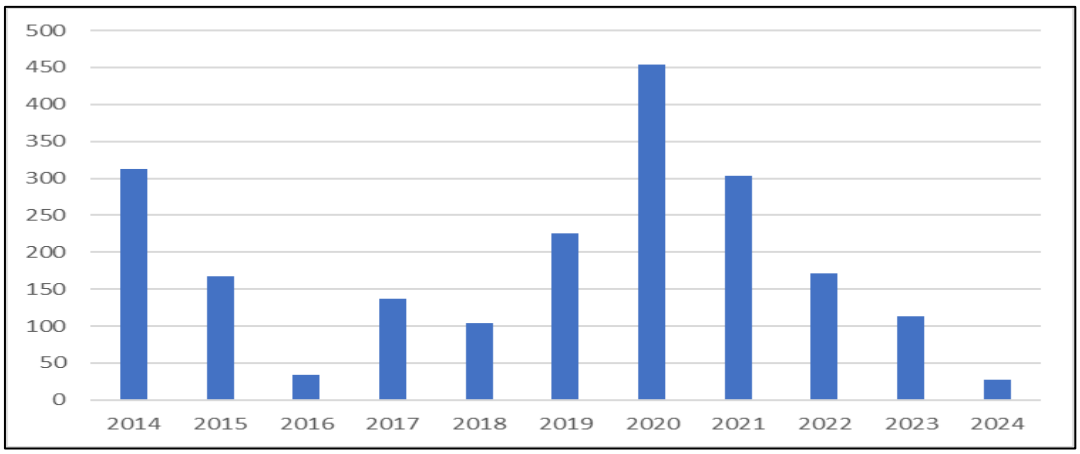

Figure 1. The Trend of Research in Knowledge Management Approach in E-Learning Platforms

Furthermore, in digital learning environments, knowledge management (KM) is deliberate process that improves knowledge development, distribution and application (Ahmad, N., & Hashim, N., 2023). KM support e-learning platforms by:

- Organize and manage content: Clear access to knowledge is made possible by well-accurate multimedia resources, lecture recordings, and structure course materials.
- Promote collaboration: Resources such as discussion boards, peer reviews, and shared content repositories let students work together and exchange information.
- Enhance personalization: KM system use analytics to tailor learning paths and make sure that particular learning objectives are met by the content.
- Use data analytics: Platforms continuously enhance the quality of their instructional materials and delivery by examining learner engagement and feedback.

An impactful example in Malaysia's MOOC Initiative under Open Learning and partnerships with public universities like Universiti Malaya (UM) and Universiti Teknologi Malaysia (UTM). MOOCs in Malaysian Universities: The Malaysian government, under the Malaysia Education Blueprint 2015-2025, adopted MOOCs as a knowledge management tool to improve accessibility and affordability of higher education (Yusof, M. F., & Halim, A., 2023). Platforms such as Open Learning and Future Learn are used to disseminate knowledge and enable self-paced, interactive learning experiences for thousands of students. Features like peer discussion forums and automated assessments enhance knowledge sharing.

Post-COVID KM-Driven Initiatives: During the pandemic, UTM utilized virtual classrooms integrated with knowledge management platforms like Google Classroom and Microsoft Teams, allowing synchronous and asynchronous learning (Rahman, N. A., Mohamed, H., & Abdullah, S.,2023). Analytics tools enabled real-time feedback and adaptive learning strategies to optimize student performance.

To reinforce the above statement, study on e-Learning implementation in Malaysian Higher Education Institutions (HEIs) is undertaken by team of researcher. The samples involved e-Learning administrators, lecturers and students from 30 Malaysian HEIs, comprising of 20 public HEIs, 7 private HEIs and 3 polytechnics. The figure 2 shows that in terms of success in implementing e-Learning, the data shows satisfactory results, as clearly. The figure shows that eight HEIs have successfully implemented their-Learning plans, each achieving a success level of 51–100%, while 12 out of 20 HEIs stated a success level between 0 to 50% only so far (Ministry of Higher Education, 2021).

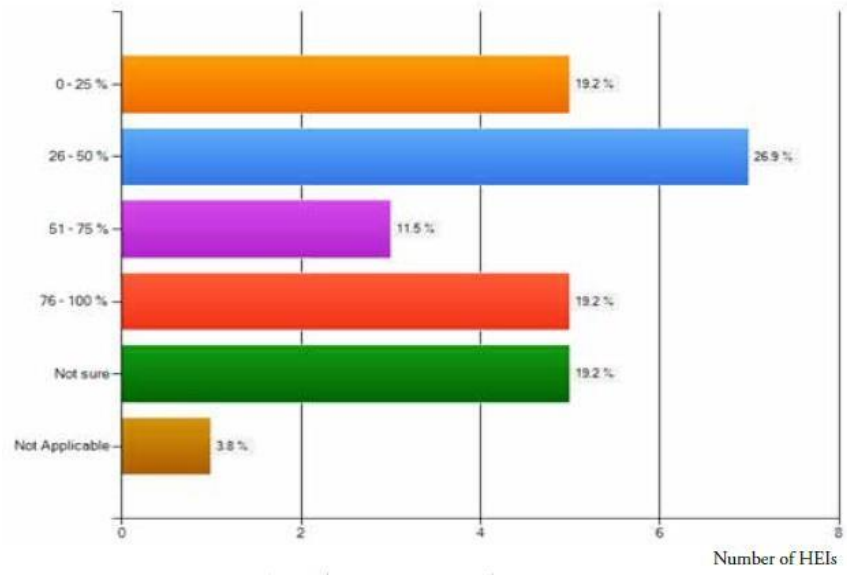

Figure 2. Level of success in implementing e-Learning

Sustainable Development Goals (SDGs) provide a comprehensive framework that addresses global challenges, including those related to education, poverty, health, and economic growth. The Sustainable Development Goals (SDGs) provide a comprehensive framework that addresses global challenges, including those related to education, poverty, health, and economic growth. In the context of e-learning platforms with the good Quality of Education (SDG 4) 81% show has promote inclusive and equitable quality education and lifelong learning opportunities. E-learning platforms can enhance access to educational resources for lecturers, allowing them to improve their teaching methodologies and learn new skills. This knowledge management aligns with SDG 4, which encourages educational institutions to adopt innovative teaching practices to enhance learning outcomes.

The figure 3 shows that e-learning platforms facilitate collaboration and partnerships reflect with SDG 17 among educators globally. Lecturers can connect with peers, share knowledge, and access diverse educational resources, promoting a culture of shared learning. This global perspective is crucial for achieving SDG 17(1.6%), which emphasizes the importance of collaboration for sustainability. However, sustainable industrialization and fostering innovation are vital components of SDG 9(3.1%). By leveraging e-learning platforms, lecturers can adopt innovative teaching practices and technologies. This not only enhances their knowledge and skills but also contributes to building resilient educational infrastructure that supports sustainable development in knowledge management to enable lecturer to achieve globalisation level.

In spite of that, E-learning can help bridge the gap in educational disparities by providing opportunities for all lecturers, regardless of geographic location, to access quality training and resources. This are going to supports SDG 10, which seeks to reduce inequality within and among countries, ensuring that every educator can thrive and contribute to a more equitable society. Implementing a knowledge management approach through e-learning enables lecturers to systematically share and manage knowledge. This includes best practices, teaching resources, and experiences that are critical for professional development. By fostering a culture of continuous learning and adaptation, lecturers can improve their competencies, aligning with the SDGs' focus on enhancing education quality and relevance.

Moreover, E-learning platforms support lifelong learning by offering flexible and accessible opportunities for lecturers to engage in professional development. This is essential for adapting to the rapid changes in the global education landscape, thereby enabling educators to stay relevant and meet the demands of globalization. By integrating e-learning platforms, the reliance on physical materials can be reduced, contributing to environmental sustainability. This aligns with SDG 13, which calls for urgent action to combat climate change and its impacts, including promoting sustainable practices in education.

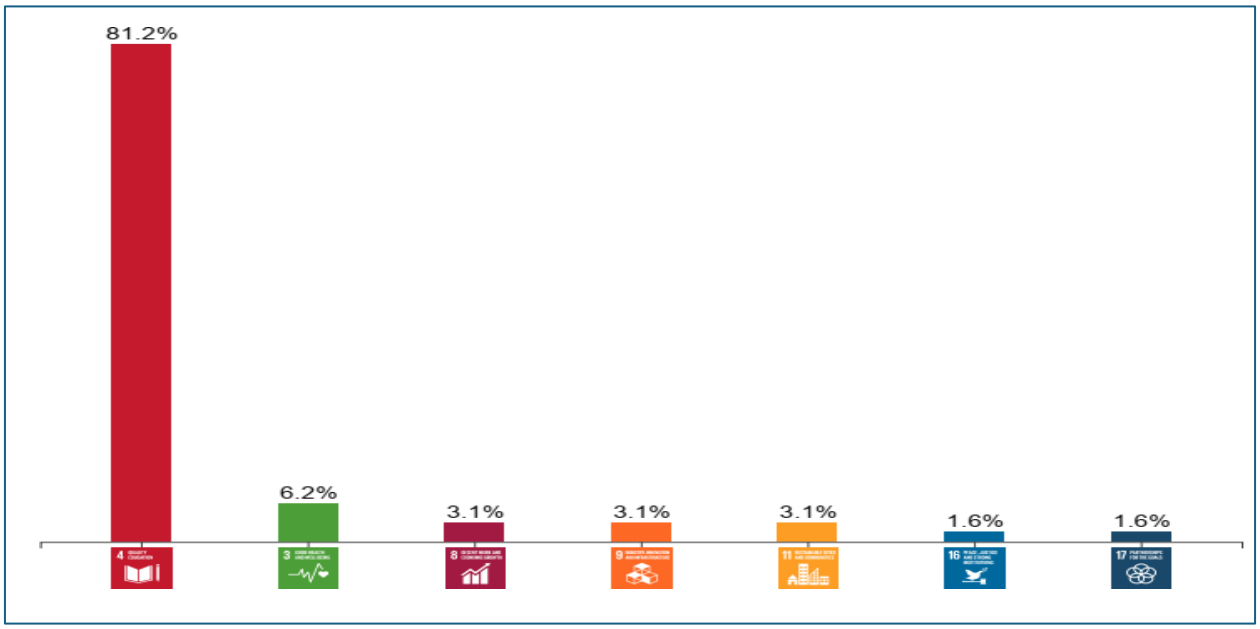

Figure 3. Relevant Sustainable Development Goals (SDG) in E-Learning Platforms among Lecturer in Malaysia

Publication by Journal

Table 1 shows the distribution of papers across various journals, with their respective percentages of the total papers analyzed. Computer Applications in Engineering Education (6.94%); this journal has the highest percentage of papers, indicating a significant focus on engineering education, perhaps with an emphasis on the application of computer technologies in educational contexts. Communications in Computer and Information Science (5.56%) and International Journal of Emerging Technologies in Learning (5.56%); these journals both have a notable share of papers, suggesting strong interest in emerging technologies, particularly in the context of computer science and information dissemination. Furthermore, Education and Information Technologies (4.17%) and IFIP Advances in Information and Communication Technology (4.17%); these journals also have a considerable percentage, reflecting the importance of educational technologies and information communication technologies in the research focus.

Table 1. Journal Names and Number of Papers

Journal	Paper	Percentage (%)
Artificial Intelligence in Medicine	1	1.39
Automation in Construction	1	1.39
British Journal of Educational Technology	2	2.78
Canadian Journal of Learning and Technology	1	1.39
Communications in Computer and Information Science	4	5.56

Computer Applications in Engineering Education	5	6.94
Education and Information Technologies	3	4.17
European Journal of Paediatrics	1	1.39
Frontiers in Artificial Intelligence and Applications	2	2.78
Global Health Research and Policy	1	1.39
GMS Journal for Medical Education	2	2.78
Health Informatics Journal	2	2.78
Human Resources for Health	1	1.39
IFIP Advances in Information and Communication Technology	3	4.17
Information and Learning Science	1	1.39
Interactive Technology and Smart Education	1	1.39
International Journal of Applied Engineering Research	1	1.39
International Journal of Applied Mathematics and Computer Science	1	1.39
International Journal of Crowd Science	1	1.39
International Journal of e-Collaboration	1	1.39
International Journal of Emerging Technologies in Learning	4	5.56
International Journal of Engineering Education	1	1.39
International Journal of Organizational Analysis	1	1.39
International Journal of Professional Business Review	1	1.39
International Review of Research in Open and Distance Learning	1	1.39
Journal of Applied Research in Higher Education	2	2.78
Journal of Biomedical Informatics	1	1.39
Journal of Cases on Information Technology	1	1.39
Journal of Coastal Research	1	1.39
Journal of Commercial Biotechnology	1	1.39
Journal of Computer Science	1	1.39
Journal of Decision Systems	1	1.39
Journal of Dental Education	1	1.39

Journal of Education and Health Promotion	1	1.39
Journal of Education Culture and Society	1	1.39
Journal of Engineering, Design and Technology	1	1.39
Journal of Industrial Information Integration	1	1.39
Journal of Interconnection Networks	1	1.39
Journal of Management Information Systems	1	1.39
Journal of Manufacturing Systems	1	1.39
Journal of Medical Systems	1	1.39
Journal of New Approaches in Educational Research	1	1.39
Journal of Parallel and Distributed Computing	1	1.39
Journal of Payavard Salamat	1	1.39
Journal of Science and Technology Policy Management	2	2.78
Journal on Efficiency and Responsibility in Education and Science	1	1.39
Management Systems in Production Engineering	1	1.39
Journal of teaching and learning resources	1	1.39
Philosophy of Engineering and Technology	1	1.39
Sustainability (Switzerland)	1	1.39
Journal of Information and Knowledge Management Systems	2	2.78

IMPLICATION OF E-LEARNING PLATFORM

Challenges to implement

Practices e-learning in organizations is not as easy as imagined. The primary hindrance to the adoption of e-learning is not the organization's knowledge management system or its proprietary technology (Nazul, 2020). It found out that the human element (people) posed the largest challenge. Research from Hamat (2021), the main challenge faced by HEIs (88.9%) in relation to the utilisation of the learning management system by academic staff was the current teaching practices. Nearly two thirds of HEIs faced the problem of staff not being well versed in IT (69.2%) and the main reasons given by the sample of lecturers who did not use the LMS provided by their respective institutions include lack of technical support (29.6%), lack of facilities (28.3%). It is vital to implement civilizing in the learning process for every member of the organization to make the online learning process successful and in line with the organization's goals. It is challenging to alter a person's paradigm because every human has challenges that lie ahead for them.

Employees generally claim that their job security will be jeopardized if their knowledge is integrated into a system and made useful again. In addition, the culture of the organization is one of comfort zone, as previously mentioned, aside from feeling threatened. It is challenging to adapt to changes because they take place outside

of the increasingly dynamic because of the security that each person (people) has. Organizations therefore need to figure out how to shift their human component.

Additionally, a thorough grasp of the significance of learning achievement inside the company is required, as it aids in the development of competencies. Each employee should receive a statement about this competency so they can better prepare for the problems of the modern world, which are characterized by intense competition. The success of the e-learning activity will depend on familiarizing yourself with the organizational learning culture. In terms of learning within the organization to respond to any changes that exist in the external environment, this helps accomplish organizational goals (Krishnamurthy, 2020).

There are numerous platforms available for conducting online learning, but implementing it is not as easy as we might think, as there are constraints or challenges associated with online learning that need to be addressed (Ejdys, 2021). Some of the significant challenges include the lack of devices for learning, an unconducive environment, the level of technology usage skills among teachers, and students' attitudes during e-learning sessions. Therefore, to solve these challenging, MOHE should establish a National Institute of e-Learning to enable Malaysian HEIs to compete globally with renowned HEIs well known in the area of virtual teaching and learning. The establishment of this centre is also expected to help determine the future direction of e-Learning, including the latest applications that are suitable for use in Malaysian HEIs.

Future Direction of E-learning

E-learning has a bright future ahead of it because to rapidly advancing technology and shifting educational requirements. E-learning has a bright future ahead of it, full with limitless opportunities for advancement and expansion. The upcoming generation of e-learning systems has the potential to completely change education for all students by emphasizing accessibility, flexibility, immersion, and personalization.

1. Personalization and Adaptive Learning

E-learning will become more customized in the future. Platforms for adaptive learning powered by AI will modify content to each learner's requirements, preferences, and speed. As a result, there will be no need for pupils to adopt a one-size-fits-all strategy, which will improve learning outcomes.

2. Immersive Technologies

• A major factor in increasing the interactivity and engagement of e-learning will be Virtual Reality (VR). With the use of these technologies, learning can become more experiential and more resemble real life, which is particularly helpful in professions like engineering, medicine, and the arts. Practical learning could be considerably improved by creating VR-based courses that let students practice in virtual settings before using their skills in the real world.

3. Lifelong Learning and Continuous Education

People will need to upgrade their skills constantly to stay up with the ever-changing job market, therefore lifelong learning will become more and more important in the future. This requirement will be more and more met by e-learning platforms that provide flexible, on-demand course options.

4. Social Learning and Collaboration

• Peer-to-peer learning and cooperation will be prioritized in e-learning, making it more social. Online discussion boards and communities will be extremely important in assisting students in exchanging knowledge and working together to solve issues. Group projects, discussion boards, and peer reviews are examples of social features that can be incorporated into e-learning platforms to help students feel more connected to one another and more collaborative.

5. Mobile Learning

- Mobile learning will continue to grow as smartphones become more powerful and ubiquitous. Learners will expect to access content anytime, anywhere, which will drive the demand for mobile-friendly e-learning platforms. Ensuring that all e-learning content is optimized for mobile devices and developing apps that offer seamless learning experiences on the go could capture a larger audience.

6. Data-Driven Insights

- Opinion: The use of data analytics in e-learning will increase, allowing educators to track student progress, identify areas of improvement, and tailor instruction more effectively. This data-driven approach will lead to more informed decision-making. Building analytics dashboards that provide detailed insights into student performance could help educators and learners alike make better educational decisions.

7. Global Reach and Accessibility

- E-learning has the potential to democratize education by making it accessible to people all over the world, regardless of their location or economic background. The future will see more initiatives aimed at making high-quality education affordable and accessible to all.

CONCLUSION

Based on the literature review; research activities (presumably publications, studies, or projects) across different years from 2014 to 2024, this research can conclude that the relationship between knowledge management and e-learning is symbiotic. By integrating KM practices with e-learning technologies, organizations and educational institutions can enhance the creation, dissemination, and utilization of knowledge. This integration supports more effective learning experiences, fosters collaboration, and drives continuous improvement. As both fields continue to evolve, their convergence will likely become increasingly important in maximizing the value of knowledge and learning in various contexts. In building a learning culture within the organization through electronic media, there is a need for knowledge control. This knowledge must be captured and organized and distributed to all employees in the organization. In conducting a learning media formation, KM is a major aspect that leads to online learning (e-learning) within the organization. An organization must be able to build KM because it can drive online learning. To build a culture of learning in organizations, KM literature suggests that people are part of the success of online learning in organizations. Thus, managers must be able to direct each employee to learn (driver for lesson, not driver for people). If a culture of learning has been formed, then the learning process in the organization will automatically run well. Learning processes are a tool used in forming a good KM. So, e-learning will not run alone without KM, because e-learning is part of KM (e-learning is a knowledge management system). In the end, starting from KM and then forming e-learning, the desired results of the organization were obtained in increasing competitiveness of competitors by utilizing e-learning as a medium to improve the competency and capability of each employee within the organization that was driven by the role of KM in the organization. The practical implication of this paper can be materialized through future research undertaking by linking the conceptual relationships between e-learning components and KM process that can allow a learning organization to promote knowledge innovation and nurture its knowledge assets.

Also, in term of SDG, HEIs are essential to helping society achieve the SDGs by not only educating people to face sustainability challenges but also by providing technical solutions, supporting and promoting social changes in their communities and countries through management, teaching and learning, scientific research, and community outreach. Research has demonstrated a strong relationship between HEIs and the SDGs and highlighted the relevance of the subject. The range of sustainability assessment instruments and studies aimed at enhancing or developing new ones is proof of the significance of HEIs' sustainable endeavours. However, there are other ways to value and support HEIs' sustainability programs outside quantifying the outcomes. Only until the SDGs are included into HEIs' strategy will the universities' obligation to advance SDG be fulfilled. There is a research vacuum on sustainability in HEIs since, in contrast to the quantity of studies devoted to

reporting and evaluating sustainability, there are comparatively few works that concentrate on strategic planning for sustainability.

The adoption of knowledge management within Malaysian e-learning platforms has accelerated digital education by improving knowledge access, collaboration, and personalization. Platforms like Open Learning, Google Classroom, and Microsoft Teams serve as examples of successful KM-driven e-learning initiatives. However, the decline in recent research (post-2021) suggests that future studies should focus on enhancing KM systems to support sustainable, inclusive education in Malaysia.

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