Leadership Styles and Knowledge Management in Islamic Educational Institutions: An Empirical Investigation

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ABSTRACT. This research explores information about Knowledge Management (KM) in education, especially in educational institutions. Using the Library Research method, the research objects used in this research include articles with the keywords KM in Education and KM. Comparative analysis of various articles is studied to produce a comprehensive exposition and conclusion of research results. The research results found that there are seven stages in KM. KM Cycle: acquire, use, learn, contribute, assess, maintain and release. The application of KM in educational institutions is important to build data registers and habits, focus on society's needs and fulfill them, organize work processes and information flows, and ensure technology availability to collect and share information, improve student learning and its results, and consider perspectives more comprehensively. Through this research, KM in education can receive more attention and development, especially in educational institutions.

Keywords: *Educational institutions, knowledge management, knowledge management praxis*

INTRODUCTION

In the current era of globalization, the rapid development of science and technology is occurring at an unprecedented speed (Parente et al., 2018; Lee & Trimi, 2021). The capability and competitiveness of each educational institution are very important in this dynamic landscape (Hitt et al., 1998; Hayter & Cahoy, 2018). This phenomenon also significantly impacts countries' efforts to improve the quality of their human resources, which are considered a strong asset in their institutions. On the other hand, although the development of science and technology continues to develop rapidly in the current era of globalization, the achievements and adaptations of educational institutions in various countries can vary significantly (Parente et al., 2018). There are differences in the approaches and strategies countries adopt to strengthen the capabilities and competitiveness of their educational institutions, including in Indonesia.

Zaim and colleagues (2019) highlight the importance of improving the quality of education in educational institutions so that organizational members have broad knowledge, enabling them to compete and survive in ever-evolving changes. They emphasized that knowledge is a crucial resource in gaining competitive advantage, being the result or product of an organization, and must be managed systematically using data and information by what was conveyed by Misbakhuddin

(2020). However, there are points of view that oppose this argument. Some people argue that too heavy an emphasis on improving the quality of education can neglect other factors that also play an important role in creating competitive advantage (Goh, 2002; Ong et al., 2010; Porter, 2011). As a result, KM becomes the key to managing and utilizing knowledge effectively and efficiently in an organization (Aichouni et al., 2013).

Kianto and colleagues (2014) emphasized that knowledge is an asset and intellectual capital important for institutions or organizations. However, not all parties have fully agreed upon this view. Some people argue that an emphasis on knowledge as an asset is too strong and can ignore the important role of other human resources, such as technical skills, creativity, and motivation, which also increase organizational productivity and effectiveness. Additionally, while KM is recognized as facilitating knowledge exchange between individuals and improving organizational performance, this approach does not always guarantee organizational success. Several studies, such as those expressed by Omotayo (2015), show that organizational success does not completely depend on targeted KM implementation, and other factors also play a role in achieving organizational goals.

Even though the popular concept of Knowledge Management (KM) is seen as a solution for preparing human resources to achieve success (Rasyid et al., 2021), not all parties agree with this view. Some critics assert that too much emphasis on KM can neglect other important aspects of human resource development, such as the development of technical skills, practical experience, and personality aspects that influence individual performance. They argue that an excessive focus on managing and developing knowledge through KM may ignore the real and unique needs of each individual in the organization. Additionally, while KM is thought to increase knowledge management effectiveness, efficiency, and productivity, this approach does not always guarantee overall organizational success. Several studies, such as those presented by Wang and his team (2014), show that effective KM implementation sometimes faces challenges in ensuring widespread adoption and implementation throughout the organization.

From previous research, the presentation of KM applied in various fields indicates that KM applied in organizations by identifying and ranking tools can enhance the organization's information security (Eslamkhah & Hosseini Seno, 2019). Ford and Mason (2013) point out that tension and conflicts within organizations due to social media are compatible and complementary with KM. Furthermore, in companies, appropriate KM can increase information security awareness among former employees or individuals who have stopped working (Lyu & Zhang, 2015). Subsequent research suggests that KM can influence the integration capabilities and hardware engineering of a team (Norbert et al., 2018). Furthermore, research by Piorkowski et al. (2013) highlights that KM implemented in the manufacturing industry is highly valuable, enabling a harmonious collaboration between humans and machines to achieve profitable outcomes for the company. From all the literature presented it can be concluded that KM can be applied in various fields. However, one field that is always present around us and requires special attention is education, where the application of KM in the educational field is necessary to leverage every existing knowledge and understand the impact it will bring. The lack of research on implementing KM in education is highly intriguing and warrants further exploration to delve deeper into the impacts and benefits it can provide.

Educational institutions are confronted with significant challenges to succeed in the competition of the globalization era, encompassing collaborative innovation, adaptation, technological mastery, and the management of intellectual assets (Zulkifly et al., 2023). Maintaining the sustainability of an educational institution requires continuous development of innovation and knowledge (Nugraha et al., 2022). It indicates the need for more in-depth research in education, not only in office work but also within educational institutions. However, the limited knowledge or management of intellectual assets possessed by each individual becomes a primary inhibiting factor for disseminating information that could support the development of the educational

institution. To address this challenge, educational institutions need to implement KM. Implementing KM can benefit educational institutions in identifying existing resources, optimizing the use of existing knowledge, and expediting the creation of new knowledge from the existing base.

In education, numerous types of knowledge can be acquired, such as organizational management, community service, research, and the learning process. The academic environment should be able to gather, manage, develop, and distribute knowledge easily. Referring to Noe'man (2017) explains that KM is a process aimed at assisting organizations in recognizing, selecting, organizing, developing, disseminating, transferring, and applying information and expertise crucial to the organization, becoming part of the organization's often unstructured memory. In education, KM is also crucial for enhancing productivity, student satisfaction, curriculum development, institutional accreditation, academic success, quality development, and responsiveness to environmental challenges (Sahibzada et al., 2022). KM can be used to improve the competence of individuals within educational institutions. Through the application of KM, it is anticipated that the quality of education in the school environment can be enhanced (Taqorub et al., 2018). Implementing KM aims to improve organizations' efficiency, productivity, and competitiveness through the benefits derived from the proper use of knowledge. This research will present information about KM in education, particularly within educational institutions. The aim is to ensure that implementing KM in educational institutions can achieve satisfactory results.

METHOD

The research conducted in this study utilizes the Literature Review method or library research. The research objects used within this study include three articles, namely the Petrides & Nodine article with the title "KM in Education: Defining the Landscape" serve as the primary references in this writing; the author supplements the obtained data with two articles which also discuss "KM" written by Lolita, L. and Lumbantobing, P. This approach aligns with Evanirosa et al. (2022), who states that literature research utilizes library sources to obtain research data. The data analysis technique employed in this research is content analysis. The researcher identifies themes, basic concepts, or specific theories within the analyzed texts from various literary sources. A literature search was conducted through the Google Scholar database using the keyword "KM," and limited articles were published from 2010 to 2023. In the final stage of the research, the researcher compares the findings from various accessed articles and presents and concludes the research results comprehensively. For a clearer depiction of the research flow, it is illustrated in Figure 1:
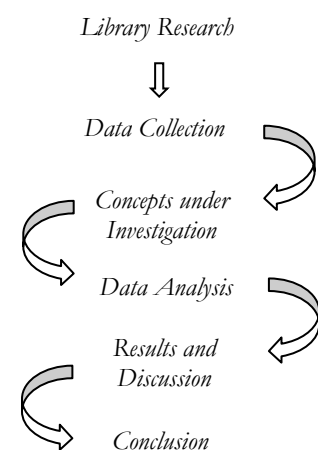
Library Research

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Data Collection

Concepts under Investigation

Data Analysis

Results and Discussion

Conclusion

Figure 1:
The Flow of Library Research

RESULT AND DISCUSSION

Result

An organization can strategically create, maintain, and distribute a valuable knowledge pool through seven stages: get, use, learn, contribute, assess, build/sustain, and divest (Lolita, 2019). The first stage in KM is 'get,' involving the search for necessary information to solve problems, make decisions, and foster innovation. It is crucial at this stage to identify knowledge sources and their access methods, whether explicit or tacit knowledge. Knowledge users must establish connections with these knowledge sources. The second stage is 'use,' where acquired knowledge is employed to innovate within the organization. The focus during this stage is on the application of the obtained

knowledge. The third stage is 'learn,' emphasizing learning from experiences to create a competitive advantage. Organizations can learn from both successful and unsuccessful experiences. This learning phase marks the transition after the organization seeks and uses knowledge to create something new from it; otherwise, the knowledge remains part of the knowledge repository.

The fourth stage, 'contribute,' refers to an individual sharing knowledge by documenting it in the organization's knowledge base. Beyond explicitly publishing knowledge, individuals are also expected to contribute by sharing successful and unsuccessful experiences, preventing others from repeating the same mistakes. Organizations must have effective memory management, ensuring attribution, requiring publication authorization, providing feedback mechanisms, and tracking knowledge reuse. Recognizing contributions, such as the number of citations referring to a piece of writing, is one way to acknowledge its popularity.

The fifth stage, 'assess,' involves the evaluation of intellectual assets, where organizations must determine critical knowledge and map existing intellectual capital with future knowledge needs. Organizations need to create metrics to assess the improvement of the knowledge base and the benefits of investing in intellectual capital. Organizational theory should be employed to identify the impact of knowledge on organizational performance, encompassing intellectual capital in the form of human capital (competencies), customer capital (customer relationships), and organizational capital (knowledge base, business processes, technological infrastructure, values, norms, and organizational culture). This assessment should consider how flexible the organization is in transforming its knowledge into products and services that are valuable to customers. The entire framework, processes, and metrics used to evaluate the knowledge base should be integrated into the overall management process. The sixth stage, 'build/sustain,' is where the organization ensures that its intellectual capital can sustain its advantage and remain competitive. Resources must be allocated to grow and maintain knowledge, both for creating new knowledge and reinforcing existing knowledge.

The final stage is 'divest,' where organizations must be willing to divest their physical and intellectual assets if these assets no longer provide added value. Organizations must analyze whether resources used to maintain this knowledge are still valuable or better allocated for other purposes. Cost analysis should also be considered as part of standard management practices. Organizations should understand when, where, and how to divest parts of their knowledge base formally. The flow of acquiring knowledge can be seen in the diagram below.
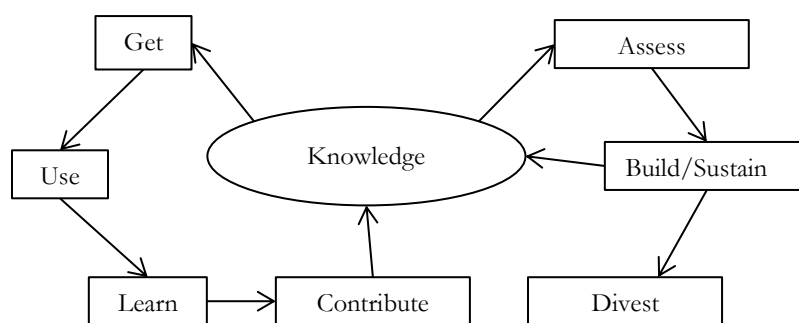

Figure 2: The Bukowitz and Williams KM Cycle

The outcomes of the KM in Education Summit in December 2002, as discussed by Petrides and Nodine (2003), suggest several ways to implement KM in educational institutions: 1) building a list of organizational data and habits for positive utilization through open participation from everyone; 2) we focus on people's needs and fulfill them through KM; 3) organizing workflow processes and information flow; 4) ensuring the presence of technology capable of collecting and sharing information; 5) enhancing student learning and outcomes by not allowing procedures without expertise; 6) pursuing continuously evolving and dynamic processes; and 7) considering

the broader picture. Petrides and Nodine also provide examples of KM implementation practices related to data, information, and knowledge across school functions. Clearer examples, as found in Table 1 below, are also presented:

Table 1: KM Application, Based on Function

Functions	Data	Information	Knowledge
Mission	Data about community needs and goals that lead to the articulation of the institution's mission	The administration and the teacher team assessing the program's effectiveness	An open discussion system for new programs and other needs related to the mission
Strategic planning	Data outcome collection information system	Information about outcomes is distributed to programs for discussion and review	The teacher team assesses data/information and identifies the need for additional data/information
Integration of technology into the curriculum	Teachers meet to test various software applications suitable for integration	The principal, teachers, and staff plan together to modify the computer lab schedule	The school team meets monthly to discuss and assess the effectiveness of technology implementation and make necessary changes
Student learning based on interaction	Website and student learning assessment	Based on the assessment results, teachers revise classroom activities to better meet the needs of the students	Teachers collaborate and learn about the needs of each class. They share opinions on effective approaches and propose them to the principal

Discussion

KM, or *Manajemen Pengetahuan*, is a practice and strategy for managing knowledge and information resources within an organization or institution to enhance overall organizational effectiveness, efficiency, and performance. In his book, Hendrawan explains that KM is a series of activities undertaken by an organization to identify, create, articulate, and distribute reusable, learnable, and known knowledge within the organization. These activities usually align with the organization's goals and aim to achieve specific outcomes, such as knowledge sharing, performance improvement, competitive advantage creation, or sustainable innovation (Hendrawan, 2019). KM is even considered an approach based on the understanding that the tasks of an organization, including educational organizations, involve comprehensively knowing when and how knowledge creation should be supported and how accumulated knowledge can be utilized to enhance productivity (Nuryana, 2017).

KM becomes an ideal choice for educational institutions aiming to achieve high-quality results. Essentially, knowledge consists of two types: tacit and explicit. Tacit knowledge comprises know-how based on experience, skills, and an individual's understanding of encountered problems. On the other hand, explicit knowledge is documented and stored in both print and electronic forms, serving as learning materials for others. The distinction between tacit and explicit knowledge lies in their focus. Tacit knowledge involves insights derived from experience, thoughts, competencies, commitments, and tasks performed by an individual.

In contrast, explicit knowledge encompasses easily captured and explained data, information, documents, notes, and files in written or graphic form (Yuliyati & Maghfuri, 2020). There are four knowledge conversion processes capable of transforming tacit and explicit knowledge. Socialization, externalization, combination, and internalization (Wulantika, 2012). Socialization is the process of sharing knowledge through direct interaction and experience, transferring tacit knowledge, such as through conversations. Externalization is the transfer process based on dialogue and reflection, converting tacit knowledge into explicit knowledge, often through writing books, diaries, magazines, or journals. Combination is the transfer process based on converting

existing explicit knowledge into new explicit knowledge through systematic organization and application of knowledge and information, like summarizing articles, stories, or books. Internalization is the transfer process based on learning and knowledge acquisition by organization members from the explicit knowledge disseminated throughout the organization via their personal experiences, transforming it into tacit knowledge for organization members, as seen in teaching faculty.

In the implementation of KM, there are several crucial factors to be considered, as outlined by Lumbantobing (2016), as follows: 1) *Human resources*, the primary factor to be considered in the effort to develop human resources is to enhance the active participation of employees or members of the organization in sharing knowledge. It also involves improving the organization's self-directed learning and innovation ability. 2) *Leadership*, organizational leaders need to possess the ability to build a culture or tradition that supports knowledge development and guides the participation of all organization members in realizing the organizational vision. Moreover, leaders should be capable of making decisions and implementing management principles and techniques based on knowledge; 3). *Technology*, technology is employed to distribute knowledge through the internet, allowing the organization's knowledge to be widely disseminated and become the collective property of the organization, 4) *organization*, the organizational aspect relates to the operational handling of knowledge, including functions, processes, organizational structure, control, refinement processes, and more, 5) *Learning*, the learning process is crucial in KM, as it is through this process that new ideas, innovations, and knowledge emerge as the primary commodities in KM. Leaders need to create an environment and character necessary for forming an organization capable of learning and providing solutions to the organization's learning obstacles.

One of the key principles of KM is to encourage organizations to know what they know, as stated by Prabowo (2010). It poses a challenge in educational institutions as many have yet to embrace this principle despite the significance of the knowledge they possess. Organizations must leverage their knowledge to formulate strategies (Zahlan & Wahid, 2019). To achieve this, institutions must develop their knowledge assets through various strategies: 1) *Macro environment*, educational institutions must consider external factors such as globalization and technology in shaping their KM approach, 2) *Organizational culture*, the internal environment of educational institutions should consider formal structures, goals, and the existing culture within the institution; 3). *Technical environment*, the infrastructure within educational institutions significantly influences their ability to adapt and meet user needs; 4) *Technical, information, and personnel*, motivating employees is crucial, enabling them to compete effectively with other educational institutions in carrying out their tasks (Pratama, 2019).

In addition to understanding what is known, there are other principles in KM. Charles Leadbeater emphasizes that organizations should create knowledge based on the following principles: 1) *Cellular*, an adaptive and non-rigid organizational structure; 2) *Self-managing*, individuals and teams capable of self-management to foster innovation and creativity; 3) *Entrepreneurial*, encouraging individual entrepreneurship to leverage opportunities for growth and change. 4) *Equitable membership and reward*, a fair reward system to cultivate a balanced sense of membership, 5) *Deep knowledge reservoirs*, focusing on specialized expertise rather than generalization, 6) *The holistic company*, leveraging knowledge assets beyond the organizational structure, 7) *Collaborative leadership*, having collaborative leadership oriented towards cooperation, informing values, and empowering members in managing the organization (Sumarno, 2012).

The application of KM, considering the principles outlined, can bring significant benefits to the development of educational institutions (Donate & Sánchez De Pablo, 2015). Thus, these KM principles can assist educational institutions in achieving better educational goals. One noticeable impact is that individuals can easily access and benefit from knowledge (Widodo, 2012). Moreover, implementing KM will enhance the understanding of resource strengths in utilizing existing knowledge, accelerating the creation of new knowledge from the already available information. It

highlights the crucial role of KM in ensuring the sustainability and competitiveness of organizations (Sopandi & Saud, 2016).

Furthermore, the detailed advantages or positive impacts of implementing KM for educational institutions include: 1) *Cost and time savings*, with structured knowledge sources, schools can efficiently use them to enhance the capabilities of human resources, especially school principals and certified teachers, thereby saving costs and time, 2). *Enhancing knowledge assets*, by utilizing available knowledge sources, every teacher can improve their competencies, foster creativity and innovation, and enhance the process of knowledge utilization within the school environment, 3) *Improving adaptability*, leveraging available knowledge sources allows schools to easily adapt to changes in the educational environment internally and externally; 4) *Increasing productivity*, utilizing available knowledge, schools can enhance productivity in the learning process and the development of graduates (Halimatuzzahrah, 2020).

Indeed, despite the evident benefits, it is undeniable that challenges will be faced. According to Verni Juita, implementing KM has several obstacles or challenges. Firstly, there is a lack of capital and qualified human resources. Secondly, cultural and individual factors influence attitudes and behaviors toward collecting, distributing, and using knowledge. Thirdly, technological factors and appropriate organizational structures play a crucial role, where the success of KM implementation requires a balance between management support, technology, and suitable organizational structures (Pratama, 2019). Nevertheless, in the end, KM remains imperative for educational institutions. Its implementation requires various elements, ranging from knowledge acquisition to the advantages and benefits of educational institutions.

CONCLUSION

KM is a practice and strategy for managing knowledge and information resources within an organization or institution to enhance overall effectiveness, efficiency, and performance. The seven stages of the KM cycle: get, use, learn, contribute, assess, build/sustain, and divest assist organizations in creating, maintaining, and distributing valuable knowledge collections to create competitive advantages and add value. Similarly, to implement KM, several stages are necessary, including building a list of data/information and habits, focusing on people's needs and fulfilling them, organizing work processes and information flow, ensuring the existence of technology that can collect and share information, improving student learning and outcomes, and considering the broader picture. Thus, KM can aid organizations in seeking, using, learning, contributing, evaluating, sustaining, and disseminating knowledge, allowing them to optimize and sustain their intellectual capital effectively.

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