

# **Optimizing Holistic Education for Sustainable Development**

**Sub-Title: Knowledge management for sustainable development**

**Knowledge management in education**

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## **Abstract**

Institutions of higher learning are society's primary tools for advancing knowledge. In educational institutions, knowledge management plays a crucial function. Administrative research such as student service, human resources systems, and teaching and learning processes can be independently identified and studied by educational institutions. More flexibility in the decision-making, teacher advancement, and learning processes can result from the usage of knowledge management systems. Nonetheless, there are several obstacles in the way of the successful and efficient implementation of knowledge management in the classroom. Examining knowledge, the value of knowledge management (KM), factors that support it, its application in education, and the difficulties and constraints of KM in educational institutions are the objectives of this study. Knowledge management is presently at the center of research and education in terms of advancement and growth on a global scale. Furthermore, this study examines methods for maintaining knowledge management in educational institutions, which can help address issues in education, and evaluates the idea of knowledge management from an educational standpoint. Primary data, which was gathered through content analysis of academic and professional knowledge management in education and training in institutions, is necessary for the approaches used to construct knowledge management. The study's conclusions show that during the previous four to five years, more people have had access to knowledge management in training and education programs in educational institutions.

**Keywords:** knowledge, importance of knowledge management(km), factors supporting knowledge management, application of knowledge management in education, challenges and limitations of knowledge management (km) in an educational institution

## **Introduction**

Knowledge is defined differently by many academics. The intentional and methodical synchronization of an organization's personnel, technology, procedures, and organizational structure to generate value through innovation and reuse is known as knowledge management. This coordination is accomplished through knowledge creation, sharing, and application as well as by ingraining best practices and important lessons learned into corporate memory to support ongoing organizational learning. In terms of growth and advancement, knowledge management has always been central to research and education. The information and knowledge generated should be aggregated in a central location and shared within society to promote further development. Rowley (2000) stated that the education sector has consistently been seen as the central hub for various processes related to knowledge, including its creation, dissemination, and learning. We assert that effective management of knowledge is crucial for enhancing the quality and efficiency of both education and research. Serban and Luan (2002) argued that the primary purpose of colleges and universities is to generate and distribute knowledge. Subsequently 2003, in 2003, Tippins emphasized that some bureaucratic and cultural barriers make knowledge management in higher education frequently exceedingly challenging. In addition to the lack of interest brought on by complacency and disengagement from the learning process, there is a lack of social interaction, which affects how well communication occurs and how social networks are formed. According to Alavi and Leidner (2001), a university's ability to generate, manage, and apply knowledge effectively is what determines its power in the twenty-first century. In higher

education, knowledge management (KM) is the art of adding value to specific knowledge assets that could increase their efficacy.

### **Literature review**

Knowledge must be carefully managed since it is a key source of value creation in an organization (Allee, 1999). In the quickly evolving global economy and society, it is a dynamic force. Audi (1998) talked about knowledge, which begins with the fundamental facts known as data, which includes facts or figures derived from information. Researchers use information technology systems and information retrieval systems to search the generated data, which is stored in a variety of documents and databases. This is because information does not become knowledge unless it is applied and used with experience, and then it is given value. Employee insight and wisdom are included in knowledge, which can be applied to decision-making. It also exists in all of an organization's fundamental operations, including its systems and infrastructure, and is integrated into work processes and teams. For the Japanese, knowledge is defined as wisdom gained from an all-encompassing viewpoint. In the context of the educational institution, the teacher's input is the student's data; when the student comprehends the information provided by the data, it becomes information; when he analyzes the information, it becomes knowledge that he aspires to; and when he applies it in the field, it becomes his wisdom.

The initiatives, procedures, plans, and systems that support and improve the creation, evaluation, sharing, storage, and improvement of knowledge make up knowledge management, which is the methodical administration of an organization's knowledge assets to generate value and satisfy tactical and strategic needs. According to Barney (1991) and Beijerse (2017), effective knowledge management enhances the performance of both public and private organizations. They also underlined that keeping and properly training staff members boosts their confidence in addition to their skill sets. For any organization to survive, knowledge creation is crucial. They must acquire knowledge as part of their everyday work activities to survive in a cutthroat market. These could be accomplished through technical means like data mining activities, formal training, or conversations with people who have similar interests. Humans are the primary creators of knowledge, and while technology can help, it cannot take the place of people or their ongoing development and advancement.

### **Factors Supporting Knowledge Management**

"Knowledge management enablers are organizational mechanisms for purposefully and consistently fostering knowledge," according to Bhatt (2011). Information technology, strategy and purpose measurement, organizational infrastructure procedures, training, education on human resources management, motivational tools, and management leadership support are some of these enablers. Knowledge management success depends on management support and leadership. They play a crucial role in serving as examples of the ideal conduct for knowledge management. They must be willing to share freely and offer their knowledge to others in the organization to accomplish this. Among the contributing elements are:

"The core benefits, values, practices, and social traditions that control the way individuals operate and behave in a company" is how Salman and Bhatt (2017) define organizational culture. Because it places a high value on knowledge and promotes its development, exchange, and use, culture supports knowledge management. People must get together to communicate, share ideas, and share knowledge. In addition, an inventive culture is required, where people are continuously urged to come up with fresh concepts, information, and solutions. To build confidence, the leadership should be transparent. The development of a knowledge management system should take into account many crucial elements, such as knowledge-based collaboration, content and document management portals, customer relationship management, data mining, and e-learning. These include the system's technological ease of use, content care, and standardization of knowledge structure and ontology (Blair, 2005 cited in Salman and Sumaiya, 2017).

Activities and Processes: This describes what can be done within the company using knowledge. In order to achieve this, Buckley and Carter (2015) distinguished four primary processes: application, transfer, storage/retrieval, and creation. These components' survival would mostly depend on the implementation of suitable intervention and methods to deal with them. Employee participation in the process could enhance face-to-face discussions, which can offer a richer medium for knowledge transfer, in addition to knowledge exchange and technology networking tools.

**Measurement:** Measurement serves as a mechanism for gathering data that provides valuable insights into a given activity or circumstance. To show management and stakeholders the value and worth of a knowledge management program, measurement is required. This is because it will wane in the absence of such proof and assurance from upper management to maintain it (Bliar, 2005 cited in Salman and Sumaiya, 2017).

The cultivation of a grassroots desire among employees to access their organization's intellectual resources is known as "motivation aids." No amount of infrastructure, investment, or technical advancement will be beneficial if people lack the motivation to perform knowledge management. Therefore, to encourage people to share and apply knowledge, the appropriate incentives, awards, or motivational aids are needed. The good behaviors and culture required for efficient knowledge management will be encouraged and strengthened as a result. A knowledge-sharing culture will undoubtedly suffer if incentives are tied to individual success on outcomes that may lead to competition (Carter and Scarbrough 2011).

**Strategy and Purpose:** These two elements serve as the cornerstones upon which an organization can deploy its resources and competencies to accomplish its knowledge management objectives. Only if management supports an organization's critical business challenge will this be possible. This viewpoint appears to concur with the literature that a knowledge management endeavor must be connected to or integrated with the enterprise business's well-defined objectives, purposes, and goals.

**Education and Training -** Employees must get education and training to better grasp the idea of knowledge management. Workers could receive instruction and training on how to use the knowledge management system and other technology tools for knowledge management. The potential and capabilities provided by these instruments shall be fully utilized to achieve this. People can comprehend their new duties in carrying out knowledge-related tasks through training. Giving them the tools to promote knowledge sharing and creative innovation is equally crucial. Effective knowledge management, according to Civi (2011), requires skill development in the following areas: cooperation, communication, soft networking, peer learning, team building, and creative thinking.

Resources are necessary for the effective use of knowledge management. This is because investing in a technology system always requires financial support; for instance, human resources are required to oversee and coordinate the implementation procedures and to fill knowledge-related positions. Organizations require time for their staff to engage in knowledge management tasks, including sharing information (Clarke and Rollo, 2015). Additionally, staff members must embrace this vision and think it will complement.

### **Theories of Knowledge Management**

Knowledge management became a recognized scientific field in the early 1990s, backed by academic researchers, business professionals, and consultants. Knowledge management can be applied in a variety of ways, and each strategy differs depending on the researcher, writer, or practitioner. The three main ideas of knowledge management are techno-centric, ecological, and organizational.

The main focus of organizational knowledge management (KM) theory is on organizational structures and the hierarchical and cultural ways in which an organization is built to manage knowledge and knowledge processes. People, relationships, and learning communities are the main topics of the ecological knowledge management theory. This includes interactions between people and organizations, as well as the internal and external elements that bring people together to exchange information. The techno-centric philosophy is centered on technology and the process of creating technology enablers to aid in information storage and knowledge flow. Knowledge management encompasses the effects of people, procedures, and technology on knowledge sharing, regardless of the theory of practice used.

Since knowledge management is a relatively new field of study, there are differing views on its goals, approaches, and even routes. Numerous theorists, including Cohen (2008), Grant (2006), and Sanchez (1997), concur that knowledge management has two primary goals. These are innovation and efficiency. Efficiency is the application of knowledge to boost output through cost reduction or speed increases. An illustration of this may be when management consultants for a company share the expertise of its staff with others to save time and provide better solutions for their clients. The use of it to produce new information and services in educational processes, however, is the focus of innovation. An illustration of this may be when IT companies wish to gather and encourage staff knowledge to enhance service delivery. Using knowledge for efficiency entails expanding the organization's knowledge base to capitalize on its current expertise. By producing new knowledge, the organization's knowledge base is expanded through the use of knowledge for innovation. An organization must employ knowledge for both efficiency and innovation to

become a truly learning organization. According to Connor (2010), knowledge management theorists must concentrate their knowledge management efforts on either improving efficiency (knowledge for efficiency) or fostering innovation (knowledge for innovation). Numerous studies have demonstrated that when implementing knowledge management in businesses, institutions must follow two main tenets. or explicit and putting it in place to transport it more quickly to where such information is required. Therefore, one or more of the following actions listed below are seen to be a part of knowledge management programs:

Techniques for identifying and accounting for intellectual capital are part of intellectual asset management.

- Creation of knowledge bases using market intelligence, specialist directories, and best practices
- Developing methodologies and abilities by assembling individuals from different fields to form a knowledge team.
- A knowledgeable leader will be appointed to advance the agenda and create the framework.
- information sharing techniques, including organized events that promote more information sharing than would otherwise occur and knowledge centers as hubs for knowledge skills and knowledge flow

Many businesses have benefited greatly from appropriately implementing knowledge management activities (Seyed, 2015).

### **Challenge in knowledge management**

Knowledge management has long been researched by academics from a wide range of fields, and there are still many important issues. Both theoretical and conceptual implementations of knowledge management face these difficulties.

Many businesses have the issue of failing to convey the importance they place on their knowledge and learning procedures. Usually, the outcome is a lack of involvement in the process of knowledge management. Many organizations and managers are becoming concerned about the idea of knowledge management and the extent to which its worth surpasses that of businesses' physical assets.

The absence of a consensus definition of knowledge management, both conceptually and theoretically, is a significant obstacle. It is necessary to address the vast range of opinions on what knowledge management entails. Management should try to find, create, use, and expand knowledge if it is a necessary resource for creating competitive advantage.

Determining what they can offer to the pursuit of organizational knowledge is another difficulty for knowledge workers. Many knowledge workers struggle to work together and support their organization's mission and strategic goals. Though many lack the skills a knowledge worker needs to understand what they can contribute to their business, knowledge management systems offer the means to collaborate and exploit organizational material. Most businesses find it difficult to explain to everyone the objectives that encourage innovation.

People are challenged to share information across the organization in a knowledge-oriented culture. It is a culture of trust and confidence at the same time. To promote knowledge management methods within the business, confidence and trust are necessary. One of the senior management's primary responsibilities should be creating an organizational culture that is focused on innovation and knowledge management. In addition, there is the issue of striking a balance between the necessity to protect information as intellectual property and the culture of transparency and knowledge exchange. The need to avoid information overload, which may be detrimental to the knowledge management process and the company as a whole, must also be balanced with the knowledge-oriented culture.

### **Discussion**

Organizations must implement the required strategies and actions outlined above to overcome the challenges posed by knowledge management issues. For knowledge management projects to be effective, appropriate, prompt, and cautious reactions are essential. As knowledge management initiatives are implemented, knowledge communities are created inside the company. It's critical to prevent these groups from turning into gatekeepers that hoard knowledge. Knowledge generation and sharing must be valued and promoted by the organization. Having capable and appropriately motivated individuals actively participating in the process is likely to be crucial to the success of any knowledge management endeavor (Filius and Roelofs, 2012). Human resources departments are essential for knowledge management initiatives. Human resources management can encourage the culture, enabling the flow and sharing of the employees' knowledge (Filius and Roelofs, 2016). Therefore, an effective flow of dialogue must be achieved, and management must

encourage informal knowledge-sharing practices. Human resources management policies must be implemented to attract and retain individuals who possess the skills, behaviors, and competencies that contribute to the organization's knowledge stock. This requires effective recruitment, selection, training, development, and compensation policies. Incorporating information into corporate decision-making procedures can also be beneficial. For those working in human resources, dedication to knowledge management is especially crucial. They are supposed to make a strategic contribution to the process of identifying the knowledge gap inside the company. The top management must coordinate the connections between the knowledge management and human resources management activities and encourage the HR professionals to participate actively in the knowledge management process.

In general, the design of particular knowledge management programs should be as flexible as feasible. To integrate knowledge management as a crucial organizational function, however, the key tenets and framework of the knowledge management project must be organized as a cohesive whole.

## **Conclusion**

Organizational issues increasingly arise via the use of knowledge and information. Therefore, the main chance to achieve considerable cost reductions, notable enhancements in human performance, and competitive advantage is through knowledge management. Studies that are somewhat helpful for many facets of managerial practice, particularly those on global company management, make up the literature on knowledge management. Nevertheless, there aren't many thorough studies that present the full scope of knowledge management issues facing multinational corporations. This study explained the primary knowledge management issues that companies face today and assessed the significant findings of the literature on the development of knowledge management throughout history. The specifics of knowledge management issues facing multinational corporations and how they affect many facets of organizational life must be the focus of future study. In this crucial but little-researched area, this study has made a small start. This topic of global knowledge management difficulties will prove to be both comprehensive and productive for future scholars.

## **Recommendation**

1. The senior leaders of the organization must establish and promote a knowledge-sharing culture. a) Ideally, this should occur at the very top of the organization and be replicated down the management chain within the organization.
2. A knowledge-sharing culture should begin early in the employee's career. a) For current knowledge workers, that work should begin immediately. Asking a knowledgeable professional to spill his guts in the last few months before retiring is but a last-minute effort to leave as much information as possible behind. It's like the last Hail Mary of the football game where the team is down by one touchdown.
3. Knowledge creation should be identified as a top priority within the work unit. a) If the knowledge creation effort is not at the top of the priority list, it is not likely to happen effectively.
4. Methods for transferring tacit knowledge should be developed. a) This task will require working with professional KM specialists who are trained in helping organizations develop and implement solutions.

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