



## A New Model for Knowledge Management Implementation Process in Organizations .

Tarek Mosbah Abdala

Department of Professions Computer

Higher Institute For Comprehensive Profession Kabaw

[tarekmosbah2014@gmail.com](mailto:tarekmosbah2014@gmail.com)

تاريخ الاستلام: 2026/02/01 - تاريخ المراجعة: 2026/02/26 - تاريخ القبول: 2026/03/07 - تاريخ النشر: 2026 /04/15

### المخلص:

تعتبر المعرفة اليوم ركيزة أساسية في أي مؤسسة، في ظل المنافسة الشديدة والتغيرات المتسارعة، ما يدفع المؤسسات إلى التفكير في تطوير أدائها وعملياتها. وفي هذا السياق، أصبحت إدارة المعرفة مورداً استراتيجياً هاماً، حتى باتت تُعتبر أساساً للنجاح أو الفشل. تُبين هذه الورقة البحثية ثلاثة عوامل رئيسية تؤثر على تطبيق إدارة المعرفة في الشركات، وهي: التنظيم، والموارد البشرية، والتكنولوجيا. ونشير إلى ضرورة تعزيز عملية تطبيق إدارة المعرفة في أي مؤسسة لتحقيق أقصى استفادة منها في بناء ميزة تنافسية مستدامة. تقدم هذه الورقة إطاراً لعملية إدارة المعرفة، مع التركيز على مراحل التطوير، مثل: البنية التحتية للمعرفة، ودمج المعرفة، وتصفية المعرفة، واستخلاص المعرفة، ومشاركة المعرفة، وتطبيق المعرفة، وأخيراً، أداء المعرفة خلال عملية إدارة المعرفة. كما تُقدم الورقة عملية أكثر فعالية لتحسين أداء المعرفة، وتهدف إلى دراسة عملية إدارة المعرفة ووضع إطار عمل لها.

**الكلمات المفتاحية:** إدارة المعرفة، عملية إدارة المعرفة، الجانب التكنولوجي.

### ABSTRACT

The Knowledge Considering as one of the most important resources in any organizations nowadays, with all these cuts-throat competitions between organizations and dynamic changes, the organizations become thought-process oriented to enhance their performance and processes. In this respect, Knowledge Management (KM) processes have been turned nowadays into strategic resource for an organization at which KM is now perceived as a foundation of success or failure. In this paper describe main factors that impact on knowledge management implementation in the organization: these are organization, people and technology. We propose that there is a demand in every organization to reinforce the implementation efforts required for acquiring.

this paper presents a conceptual framework for KM processes. It primarily focuses on enhancing stages like knowledge infrastructure, knowledge integration, knowledge filtering, knowledge acquisition, knowledge dissemination, knowledge utilization, and ultimately, knowledge performance throughout the KM process. The document outlines a more effective

method for enhancing Knowledge Performance. The aim of this paper is to explore and develop a framework for the knowledge management process.

**Keywords:** Knowledge management, Knowledge Management Process, Technological Aspect.

## 1. INTRODUCTION

Organizations Knowledge is seen as one of the most important resources in any organization. The success or even the survival of any organization depends on how effectively it manages the knowledge present internally and externally (Liu, C.Y, 2005). Reuse of existing organizational knowledge gained via past experience can greatly reduce the time spent on problem solving and increase the quality of work. Two types of knowledge management exist in organizations; tacit and explicit. Significant efforts have been made by the construction sector to develop and implement systems to manage capturing, storing and retrieval of explicit project related information.

Knowledge Management (KM) has become an important and integral part of all organizations. It is a fast emerging field which is giving its significant contribution in an organization's growth and competitiveness. Competitive Advantage is important for an organization's performance and growth. Many contemporary organizations are losing sight of competitive advantage to grow and compete with domestic and global players because of mismanagement of their experiences, expertise and knowledge assets. Hence, they are in process of implementation of various KM initiatives, which leverages organization's knowledge internally and externally to create and sustain a competitive advantage. However, most organizations while implementing KM focuses mainly on Information and Communication Technologies (ICT) giving lesser emphasis on other important factors which are must for gaining significantly from KM system and making efficient use of their knowledge assets.

## 2. LITERATURE REVIEW

Ahmad and Balisany (2023) emphasize that the successful execution of Knowledge Management processes fuels innovation and improves decision-making abilities, essential for sustained organizational success. Through the organized handling of knowledge, organizations can react more efficiently to external shifts, seize opportunities, and enhance their strategic performance. Moreover, KM processes are crucial in aligning an organization's knowledge assets with its strategic objectives, guaranteeing the best use of intellectual resources (Centobelli et al., 2021).

Research findings indicate that KM positively effects strategic performance. Abdalla et al. (2023) and Chawla and Joshi (2021) discovered that companies that have solid Knowledge Management practices regularly attain greater strategic performance, particularly in sectors marked by fast technological progress (Shukur, 2024). In these settings, the capacity to handle and utilize knowledge efficiently is a crucial factor that fosters innovation, effectiveness, and flexibility.

Additionally, Knowledge Management processes enable the blending of knowledge throughout organizational divisions, dismantling barriers and encouraging teamwork. This guarantees that knowledge is not just preserved but also strategically utilized to achieve long-term goals.

Aligning knowledge management practices with strategic objectives enables organizations to improve decision-making, optimize operations, and attain sustainable growth (Donate & de Pablo, 2021). In summary, the findings highlight the essential function of Knowledge Management processes in helping organizations attain outstanding strategic performance and sustain a competitive advantage in the current fast-moving global landscape.

Ahmad and Balisany (2023) highlight that effective implementation of 3. Knowledge Management processes drives innovation and enhances decision-making capabilities, which are critical for long-term organizational success. By systematically managing knowledge, organizations can respond more effectively to external changes, capitalize on opportunities, and improve their strategic performance. Furthermore, 3. Knowledge Management processes play a pivotal role in aligning an organization's knowledge resources with its strategic goals, ensuring optimal utilization of intellectual assets (Centobelli et al., 2021).

Empirical studies support the positive impact of 3. Knowledge Management on strategic performance. Abdalla et al. (2023) and Chawla & Joshi (2021) found that organizations with well-established KM practices consistently achieve higher levels of strategic performance, especially in industries characterized by rapid technological advancements (Shukur, 2024). In such environments, the ability to manage and apply knowledge effectively is a key differentiator that drives innovation, efficiency, and adaptability.

Moreover, KM processes facilitate the integration of knowledge across organizational units, breaking down silos and promoting collaboration. This ensures that knowledge is not only retained but also strategically applied to meet long-term objectives. By aligning knowledge management practices with strategic goals, organizations can enhance decision-making, streamline operations, and achieve sustainable growth (Donate & de Pablo, 2021). In conclusion, the evidence underscores the critical role of KM processes in enabling organizations to achieve superior strategic performance and maintain a competitive edge in today's fast paced global environment.

### 3. Knowledge Management Perspectives

#### 2.1 Definitions

- Knowledge Management is the collection of processes that govern the creation, dissemination, and utilization of knowledge (Abdullah, R. Selamat, (2005), Knowledge management is the management of the organization towards the continuous renewal of the organizational knowledge base - this means e.g. creation of supportive organizational structures, facilitation of organizational members, putting IT-instruments with emphasis on teamwork and diffusion of knowledge (Thomas Bertels).
- Knowledge Management for the organization consists of activities focused on the organization gaining knowledge from its own experience and from the experience of others, and on the judicious application of that knowledge to fulfill the mission of the organization. These activities are executed by marrying technology, organizational structures, and cognitive based strategies to raise the yield of existing knowledge and produce new knowledge (R. Gregory Wenig).
- Knowledge management is the process of discovery, acquisition, creation, dissemination and utilization of knowledge for the organization.

- KM is a system's approach to identify, validate, capture and process knowledge, and then organize the knowledge elements into knowledge assets for business function operations and decision making.
- KM is the process of capturing and making use of the organization's collective expertise developed out of experience for improving business operations and performance.
- KM is the discipline of capturing expertise, competencies and skills and storing in databases in the form and kind for dissemination and application for resolving issues affecting the businesses and its position in the market.
- KM involves blending a company's internal and external information and turning it into actionable knowledge via a technology platform.

#### **4. Knowledge Management Importance**

Knowledge has been recognized as an important productivity factor for the organization

- Effective knowledge management should dramatically reduce costs.
- Effective knowledge management should also dramatically increase our speed of response as a direct result of better knowledge access and application.
- Effective knowledge management, using more collective and systematic processes, will also reduce the tendency to 'repeat the same mistakes'. This is, again, extremely costly and inefficient.
- Effective knowledge management, therefore, can dramatically improve quality of products and/or services.
- Better knowing our stakeholder needs, customer needs, employee needs, industry needs, for example, has an obvious immediate effect on our relationship management.
- Effective knowledge management, especially accelerated knowledge creation, is the driver for innovation. Increasingly, products and services are becoming 'smarter' and more knowledge based.

#### **5. Types of Knowledge Management**

Organization knowledge is frequently categorised into two types.

##### **4.1 Tacit knowledge**

- Personal experience, context -specific, more difficult to extract and codify can be transmitted through social interactions and socialization.
- Personal knowledge embedded in individual experience and involves intangible factors such as personal beliefs, perspective and the value system.
- Tacit knowledge is hard to articulate with formal language
- For communication this knowledge must be converted into words, models or numbers to understand and to communicate (Prateek Bhanti, Alavi, 2011).

##### **4.2 Explicit knowledge**

- What is recorded , easily identified , shared and can be articulated into formal language text, mathematical expressions, specifications, manuals, etc.

- Explicit knowledge in electronic media can be readily transferred to others
- This knowledge can be systematically expressed; it is possible code and it can be stored, transferred and shared through any medium.
- Explicit knowledge is that which is written down or expressed in some tangible form, such as in a procedure manual, document or computer database like Dictionaries, software product, rule, procedure, solution model and so on

#### **6. Knowledge Management Transformation Model**

Knowledge is most valuable for enterprise, but it is easily disappear when some employees quit their jobs. After understanding the characteristics and classification of knowledge, we must proceed to manage with a knowledge transformation model proposed by (Nonaka and Takeuchi Richard Nonaka Ikujiro and Hirotaka Takeuchi, 1995), as shown in Figure 1. From figure 1, we understand the creation of organizational knowledge is the interaction of tacit and explicit knowledge. There are four-transformation models.

##### **5.1 Socialization**

Tacit knowledge can be converted from tacit knowledge by sharing each individual experience. In other words, through exchanging our own experience and acknowledgement with others, a mutual agreement can be achieved. This process notes as person to person.

##### **5.2 Externalization**

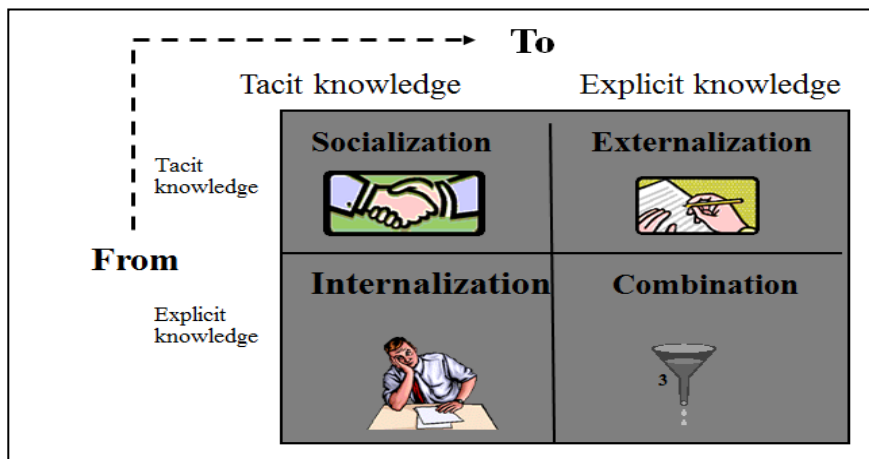
Explicit knowledge can be converted from tacit knowledge by using implication, analogy, concept, assumption, and model to sufficiently express tacit knowledge. In other words, through communication of our experience and acknowledgement with organization, a solid organization concept can be established. This process notes as person to organization.

##### **5.3 Combination**

Converting explicit knowledge into explicit knowledge does this process. In other words, by effective and systematic management, it can make a significant contribution to organization.

##### **5.4 Internalization**

Converting explicit knowledge into tacit knowledge does this process. When the experience is internalized into individual tacit knowledge through Socialization, externalization, and combination, it becomes a valuable asset. In other words, information from books, Internet, and other resources can become individual tacit knowledge through reading. This process notes as explicit knowledge to increase person's knowledge.



**Figure 1: knowledge transformation model**

## 7. Proposed Knowledge Management Model

The importance of implementing the knowledge management framework for organizations is to provide guidelines for executing KM successfully, save time and efforts and to avoid inaccuracies. The main emphasis was placed upon the process knowledge infrastructure, knowledge combination, knowledge filtering, knowledge repository, knowledge sharing, knowledge application and finally, knowledge performance. These elements are fully discussed in this section.

### 6.1 Knowledge Infrastructure

Knowledge infrastructure, the first element in this conceptual framework, relies on building the appropriate culture for Knowledge Management System (KMS). It also establishes the awareness of the importance of KM among the individuals in the organization (Altaher, A.M, 2010).

### 6.2 Knowledge Combination

This element of our framework is concerned about Knowledge combination phase to collect information discovered, captured and created into a single portfolio. This collected information is combined and prepared to go through evaluation, filtering then storage to prepare it for sharing and application. This phase can be viewed as a temporary repository of collected information from the infrastructure phase.

### 6.3 Knowledge Evaluation

Knowledge evaluation phase used to assess the knowledge based on the value; accuracy and relevance after the knowledge have been combined from different sources.

#### **6.4 Knowledge Filtering**

Knowledge filtering prepares knowledge to be stored in the next phase, after going through classification, categorization and organization. Knowledge also will be classified based on the sensitivity. Furthermore, knowledge can be categorized to recognize, distinguish and understand the information for exact purposes based on a specific purpose or type. Categorizing can be used to make practically significant differentiation between dissimilar categories of knowledge.

#### **6.5 Knowledge Repository**

Knowledge repository serve as a storage for the knowledge collected in the past stages. Therefore, Knowledge repository is viewed as organization memory and retention of knowledge assets.

#### **6.6 Knowledge Sharing**

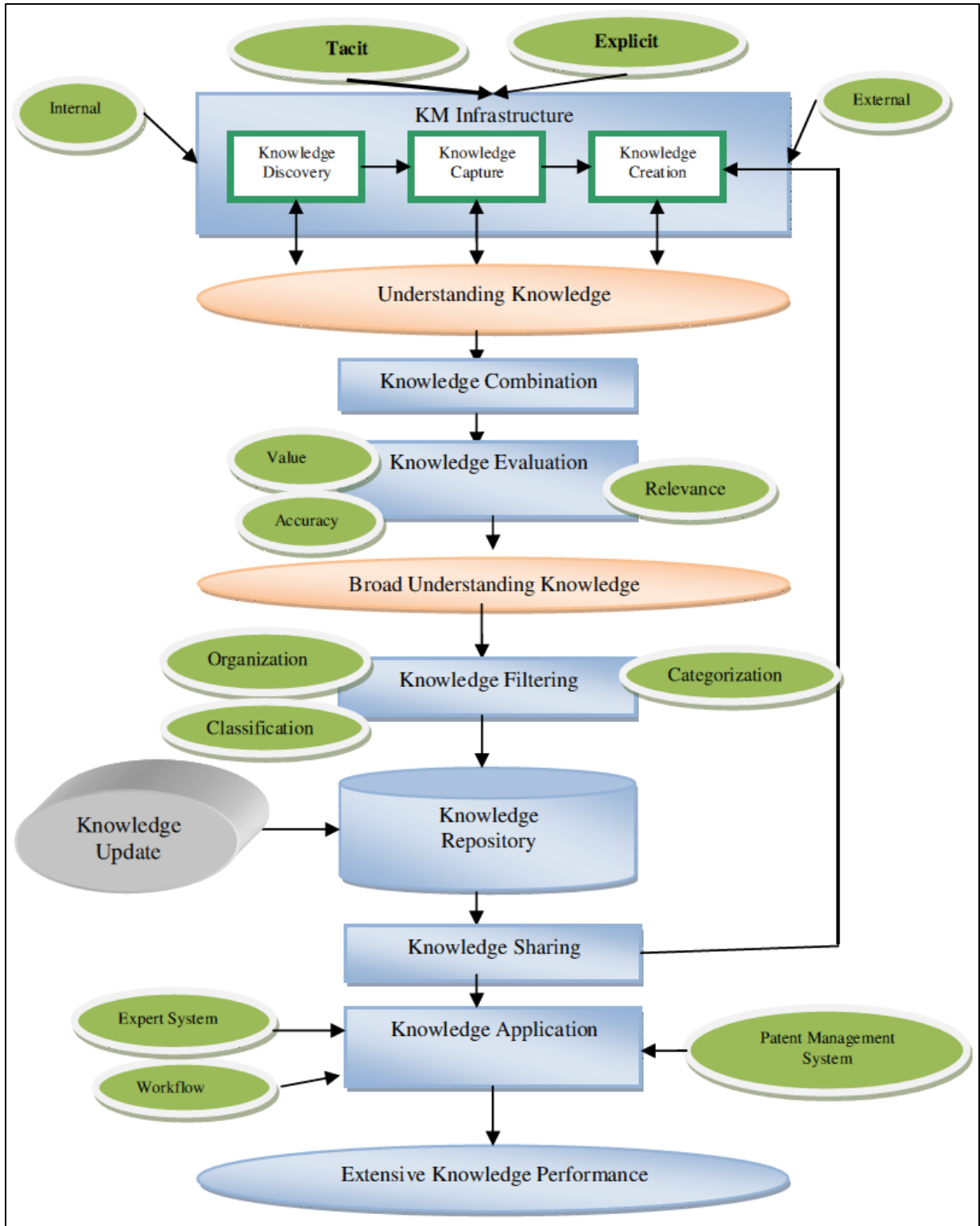
Knowledge sharing concerns are in transferring and sharing knowledge among the individuals in the organization. In addition, this phase is considered as a core process of the KM, since the main goal and objectives of the KM research and practice is to foster the flow of knowledge among individuals (Altaher, A.M, 2010). Moreover, a successful knowledge management system is a shared system where people can retrieve and contribute to the knowledge pool as well. In fact, people must speak same language to be able to share knowledge.

#### **6.7 Knowledge Application**

Knowledge application's purpose is to apply and represent information to knowledge seekers in appropriate matter. Also, Knowledge application is the solution to wrapping knowledge to guarantee widespread usage. Moreover, knowledge application translates information into practical tools and applying the knowledge into real world. Knowledge application presents the knowledge in more clear and storable way.

#### **6.8 Knowledge Performance**

Knowledge Performance, the final stage in the KM cycle which concentrates on evaluating every KM system, is performing according to the organization goals and objectives. Moreover, KM goal is to capitalize on the knowledge assets to reach maximum attainable business performance (Sabherwal, R. 2001). Also, knowledge performance is concerned with evaluating the process, performance and impact of KM and perceives if new knowledge was created. Additionally, KM can improve a business process by contributing to knowledge performance which can evaluate the impact of the change and provide a further enhancement.



**Figure 2: Conceptual Framework for Knowledge Management Process**

## 7. CONCLUSION

Knowledge is becoming an important asset for every organization. Managing knowledge enables organizations to achieve their objectives in more effective and efficient manner. People are the most important assets of an organization. People within the organizations must be encouraged to share the knowledge and proper incentives must be given to those who are actively involved in the process of creating new knowledge. An effective KM gives competitive edge to an organization and provides relevant information as and when required for effective decision making and reviewing the organization's strategy to achieve its desired objectives. KM must be incorporated in organization's culture and people's commitment. There are great innovations and technological changes taking place each day. These new technologies are make implementation of KM easier, affordable and more cost effective.

This study attempted to provide a comprehensive model for knowledge management framework. The framework provided the basic phases of the development life cycle and the steps within each one. Although some of the steps can be categorized under two different phases or a separate mid-phase, the steps were satisfactory enough to provide an abstract level of process or work categorization. Because of this overlapping, sharing and reusing the knowledge work or its components brings advantages to knowledge management development life cycle.

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