Exploring Knowledge Management Implementation: A Case of International Islamic University Malaysia

Maznah binti Zakaria Dar al-Hikmah Library, International Islamic University Malaysia

Abstract

This paper presents the implementation of knowledge management (KM) at the International Islamic University Malaysia (IIUM). The author begins with an exploration of knowledge and KM concepts. Factors influencing the implementation of KM at IIUM are also discussed and a conducted knowledge audit as well as subsequent analysis are presented, culminating in actionable recommendations. The recommendations aim to enhance IIUM's KM initiatives, suggesting approaches for successful implementations. By addressing key areas identified in the audit, IIUM can consider ways to develop a more effective and successful KM journey by optimising their developed KM practices, and foster a culture of knowledge sharing and utilisation.

Keywords: knowledge management, knowledge audit, knowledge asset, IIUM, academic libraries

Introduction

International Islamic University Malaysia (IIUM) initiated the implementation of Knowledge Management (KM) as early as 2011, establishing processes to manage knowledge effectively, encourage knowledge sharing, and foster a KM culture within its community. KM is a combination of practice, processes, and systems, as well as encompassing daily methods, structured procedures, and supportive technologies such as databases and collaborative platforms that support the storage, retrieval, and dissemination of knowledge.

This paper details IIUM's experience in implementing KM, including a knowledge audit and its results. The first part of this paper delves into the concepts of knowledge and KM by examining existing literature and definitions. It then explores the factors influencing the implementation of KM at IIUM. The third part of this paper discusses the knowledge audit conducted and subsequently analyses the audit result. Finally, the paper concludes with actionable recommendations for IIUM to achieve a systematic KM implementation.

Literature Review

This section of the paper provides a brief literature review on the definitions of knowledge and KM. It summarises key concepts from selected sources, including refereed journals and books, without delving into a detailed analysis.

Knowledge and Knowledge Management Defined

When we talk about KM, it is imperative to understand first about knowledge and its relation to KM. is According to Nonaka and Takeuchi (1995), knowledge represents the set of justified human beliefs that can help the organisation find the truth and enhance the organisation's capability while Gonzalez (2017) described knowledge as the process

of understanding the information, facts, skills, or experience someone has acquired whether through education or self-experience.

Knowledge can be classified into two forms; tacit and explicit. Polanyi (1998) and Nonaka and Takeuchi (1995) describe tacit knowledge as residing within individuals and is intangible, encompassing thoughts, experiences, skills, behaviours, and expertise while explicit knowledge is tangible and has been formalised into documents or other easily communicated forms. O'Dell and Grayson Jr. (1998) noted that tacit knowledge is challenging to catalogue, highly experiential, and difficult to document. This view is supported by Fadzil (2020) and Nonaka and Takeuchi (1995), who described tacit knowledge as informal and difficult to manage. Despite these challenges, both tacit and explicit knowledge require effective management.

To effectively manage knowledge, KM must be implemented. KM is defined by Meher and Mishra (2022) as a process that involves the development, storage, recovery, and dissemination of information and expertise. O'Dell et al. (1998) defined KM as a "conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organisational performance" (p. 6).

Davenport and Prusak (1998) defined KM as a systematic and organisationally specified process of managing institution's knowledge. This involves acquiring, organising, sustaining, applying, sharing, and renewing both tacit and explicit knowledge. Effective knowledge management requires the integration of both tacit and explicit knowledge.

In essence, effective knowledge management, as outlined by various researchers, integrated both tacit and explicit knowledge to enhance organisational performance through systematic processes of acquisition, organisation, and dissemination.

Why Did IIUM Embark on KM

Before embarking on KM, IIUM faced several issues and challenges in managing its organisational knowledge. The knowledge at IIUM existed in silos, stored in repositories known only to some, and available to selected individuals or departments, creating significant access issues. Furthermore, there was a need to ensure that stakeholders, decision-makers, as well as those involved in improving best practices and learning from past experiences had timely access to relevant knowledge and insights. IIUM employed methods such as storytelling and oral history to capture these elements. IIUM knew that it was a priority to actively address the need for knowledge retention and in doing so, there needed to be a way to capture knowledge as well as institutional know-how (Nair and Munusami, 2019).

People who need "just in time" knowledge are unable to know who has the relevant knowledge. Connecting to the right person to impart experience or advice becomes a challenge. When everyone starts sharing their knowledge, the learning and training process is facilitated and improved. It also reduces any repetition of mistakes if they know how to do things correctly from the beginning. Cooperation among staff and individuals is further enhanced through KM.

In addition, critical knowledge within individuals is lost when they leave the organisation or retire. Therefore, a meaningless effort is spent in recreating the lost knowledge. This issue can be overcome if IIUM has a proper knowledge transfer and retention programme as part of its KM initiatives and processes. As an educational institution, IIUM must capture and manage its knowledge. The need to capture and manage knowledge helps to prevent knowledge loss. When a staff retires or resigns and their knowledge is not properly captured, it is a great loss to the organisation since it has invested a lot in training them.

Another issue is creating a knowledge-enabling environment for people to share their experiences and establishing special methods for identifying, creating, storing, sharing, and using the kind of knowledge that is often not documented (tacit knowledge). Valuable contributions to knowledge sharing and transfer also cannot be forced. IIUM faces this challenge even if they can allocate employees to knowledge-sharing activities or assign them to dedicated projects and instruct them to contribute their knowledge to the organisation.

Meso et al. (2023) highlighted the importance of KM for leveraging knowledge and boosting work performance. Thus, implementing KM at IIUM is vital for addressing these issues by improving the sharing and retention of both tacit and explicit knowledge.

The Roles of Dar al-Hikmah Library, IIUM

As the division responsible for spearheading KM, the library is expected to play several vital roles. The library helps spread awareness across the university about KM, ensuring everyone understands its goals and purposes while encouraging collaboration among faculty and offices at IIUM.

The library actively promotes the sharing and adoption of KM practices across the campus by hosting guest speakers and providing talks as well as webinars on the latest best practices. It plays a crucial role in developing and maintaining a single, integrated knowledge repository called iKnow and ensuring that it is up-to-date and accessible to everyone. In addition, the library helps build connections with other libraries, academic institutions, and organisations. This collaboration facilitates information exchange and collaborative projects. It also helps to shape KM leadership by offering insights into effective practices, identifying needed skills and values, and helping to design programmes that encourage KM and learning excellence.

The library defines roles and responsibilities related to KM for staff members, ensuring that everyone knows what is expected of them. It also tracks library usage, evaluating the effectiveness of knowledge resources, and gathers user feedback. Finally, the library monitors the progress of the KM initiatives, regularly reviewing its effectiveness and suggesting improvements based on observations and user needs.

Knowledge Audit at IIUM

IIUM started the KM initiative with a knowledge audit exercise. A knowledge audit is essential before implementing KM because it can be a valuable tool for organisations to

understand their knowledge assets better, identify areas for improvement, and make informed decisions about leveraging knowledge resources to achieve goals. Knowledge asset is valuable information or expertise an organisation holds. A knowledge audit is instrumental as it evaluates the knowledge risk by identifying, capturing, and assessing the organisation's knowledge (Ayinde et al, 2021).

Benefits of the Knowledge Audit

For most organisations, the real value of knowledge audit is in the benefits it brings to the bottom line. Among the key benefits of the knowledge audit to IIUM are:

1. Improve organisation memory

Knowledge assets need to be managed when it is not sufficient to keep the knowledge in human memory or community memory. The important things about a knowledge asset is simply knowing where things are and who owns it.

2. Know the knowledge needed to support goals

The result of the audit helps IIUM identify what knowledge is needed to support the goals of the overall organisation, the individual, and the team.

3. Save knowledge acquisition cost

A knowledge audit provides an inventory of what knowledge exists in IIUM and where it exists, revealing both gaps and duplications, thus saving search time and acquisition costs.

4. Provide a good basis for KM initiative start-up

A knowledge audit is a fundamental first step in any KM initiative, seeking to identify what an organisation knows to leverage it to a greater advantage. IIUM needs to understand its present knowledge assets before it can begin to develop an improvement process or a KM initiative.

Knowledge Audit Methodology

The audit methodologies used at IIUM were discussion groups in the form of know-how workshops. Each group comprised 15 to 20 cross-section representatives of different functions and offices in IIUM who understood the existing documents and knowledge assets in one's unit or area. They were divided into groups that focussed on four areas:

- 1. Quality Teaching and Learning
- 2. Research and Innovation
- 3. Holistic Student Development
- 4. Talent Management

Various methods and activities were conducted during the workshops such as strategic knowledge needs template, KM diagnostic cards, 635-creativity technique, knowledge stock-taking, and card sorting method. At the end of the sessions, an evaluation was conducted to assess the effectiveness of the overall sessions.

Knowledge Audit Findings

The data and information gathered from the workshops were then analysed and classified into four main topics:

1. Knowledge Needs Analysis

The table below shows the findings of the knowledge needs:

Figure 1: Knowledge needs findings

Aspects	Findings
General	 About 80% of the knowledge needed is available in IIUM. Of the available knowledge, 80% is classified as sufficient. Access to this knowledge is low, only half of it is easy to access. The necessary awareness of KM among staff is still low. KM activities are not integrated into work processes.
Explicit knowledge	 Explicit knowledge is adequate and available internally but access to it is limited. Some key knowledge is not disseminated to people who need it. Knowledge is dispersed and management of explicit knowledge is unsystematic. Finding explicit knowledge is difficult as the information system is not user-friendly and not integrated.
Tacit knowledge	 A larger need for tacit knowledge is required as compared to explicit knowledge. Tacit knowledge is rich and available internally in IIUM. Cross-department networking is inadequate. The internal expert skills directory is available via CV Online but insufficient. There is a lack of mechanisms and incentives to encourage tacit knowledge sharing.

2. Knowledge Inventory Analysis

During the audit exercise, participants identified and located knowledge assets at IIUM. This included detailing the type, location, and usage of the knowledge as well as, its value, accessibility, and frequency. The knowledge assets inventory was summarised in the table below:

Figure 2: Knowledge Assets Inventory List

Knowledge	Knowledge Item	Format	Location	Accessibility
Category				
	E-Learning policy	Hardcopy & softcopy	Centre for Professional Development	Open
Academic, teaching, and	SOP training for academic staff	Hardcopy & softcopy		Open
learning policies	Guide on supervision	Hardcopy	Centre for	Open
	Postgraduate policies	Hardcopy & softcopy	Postgraduate Studies	Open

	ISO procedures on teaching and learning	Hardcopy & softcopy	Quality Institutional Audit Management System	Open
	Senate policy	Softcopy	Electronic Digital Management System	Limited
Centre for Credited	CLAV Training of Trainers (TOT) module	Hardcopy	CLAV	Open
Leadership and Virtues (CLAV) training and development	CLAV module development	Hardcopy	CLAV	Open

3. Knowledge Flow Analysis

An inventory of knowledge assets revealed what resources an organisation has, while the analysis of knowledge flows examined how this knowledge moved throughout the organisation. Knowledge flow refers to the movement of knowledge within an organisation. This includes tacit and explicit knowledge.

The analysis of knowledge flow examines how effectively knowledge is shared and used across people, processes, and systems. Effective knowledge flow ensures that valuable information reaches the right people at the right time.

The knowledge flow analysis is summarised in the table below:

Figure 3: Results of knowledge flow analysis

Category	Item
	Critical knowledge resides with the experts rather than being stored in the
	portal. When they leave, their knowledge will leave with them, because
	there is no provision for transferring it.
	People do not know what information is held, so they often duplicate
	resources or duplicate work unnecessarily.
	There is no provision for handover periods where new staff can
	understudy departing staff in roles involving critical knowledge.
	There are people who hold critical knowledge whose importance is not
Process	appreciated.
	There is no centralised or systematic process for identifying skill and
	competency needs, keeping them relevant, and developing mechanisms
	to meet the needs.
	Staff complained that they are never informed about what other groups
	are doing, even when it impacts them.
	There is no policy and process for identifying, capturing, managing,
	transferring, or promoting information, knowledge, and better practices in
	the organisation.

	There are areas of work where it is clear that the skills and competencies
	of staff have not kept pace with the changing demands of their roles.
	Ideas for improvement are lost and not acted on, so people are
	discouraged from contributing.
	When mistakes are found, there is a culture of finger-pointing, blame, and
People	lack of ownership for the problem. The organisation is also slow to
·	acknowledge the mistake and ensure it is fixed.
	Groups think "it's not my priority" when receiving or dealing with a
	request from other groups. There is no sense of common purpose.
	Staff attend training courses but this apparently has no impact on their
	work performance.
	Information and knowledge are stored in the intranet or portal, but the
System	information system is not user-friendly and not readily accessible to
	employees who need it.

4. Knowledge Map Analysis

Once information about the sources, ownership, sharing, and usage of this organisation's knowledge was collected, it could be mapped to show who knows their locations, accessibility, and key contacts. The university needs to develop and share a knowledge map with its community.

In summary, the audit identified seven primary strengths in IIUM's knowledge management approach. IIUM needs to continue leveraging on these strengths effectively. These strengths are as follows:

- 1. About 80% of the knowledge needed was available within IIUM. Of the available knowledge, 80% was deemed sufficient.
- 2. Explicit knowledge was adequate and available internally. Most explicit knowledge was stored electronically, which reduced the need for physical copies and digitalisation.
- 3. Tacit knowledge was rich with core experts available within IIUM. The main challenge was identifying who possessed specific knowledge.
- 4. Staff appreciated the importance of tacit knowledge and generally agreed that it should be captured before it leaves IIUM.

Recommendations Based on Audit Findings

Based on the findings from the knowledge audit, IIUM needs to improve its KM initiatives. Some recommendations that can be taken into consideration are as follows:

1. Encourage a learning workplace

A continuous learning culture needs to be promoted and valued to encourage a learning workplace.

2. Create formalised internal knowledge processes and standards

Core processes need to be mapped, documented, and shared effectively within the organisation.

3. Connecting people to content

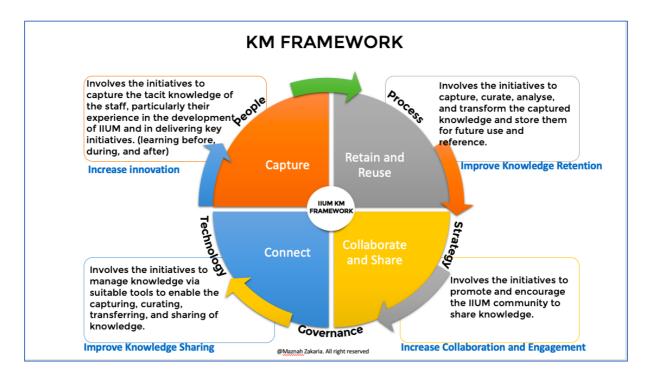
The technology needs to be used as an enabler to connect people to content.

4. Connecting people to people

Tools and platforms need to be provided to connect people to people.

Conclusion

To conclude, understanding the definition and key concepts of KM is crucial for organisational success. The knowledge audit at IIUM highlighted areas for improvement, underscoring the need for a strategic KM approach. An ideal KM goal is to build a culture of continuous knowledge sharing, which will significantly boost learning and efficiency. Recent trends demonstrate that KM serves as a catalyst for digital transformation, with advanced tools like AI. In this context, capturing tacit knowledge becomes essential, as it contains valuable insights that are not easily documented but crucial for leveraging the full potential of KM. As an organisation implementing KM, IIUM implemented the framework as illustrated below.



This framework illustrates how key elements like people, processes, strategy, governance, and technology are integrated into a successful KM strategy. Senior management's commitment is important, as leaders must support KM initiatives, allocate necessary resources, and cultivate a culture of knowledge sharing.

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