

# Knowledge Management Practices In Academic Institution: A Proposed Concept

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## ABSTRACT

*The information age, facilitated by the development of information communication technology, leads to an emergence of a new type of economy called knowledge economy. As the world becomes borderless, Malaysia will have to face insurmountable global competitiveness. The challenge of competitiveness and productivity that Malaysia has to face is substantially higher. Therefore a quantum leap in total factor productivity is needed and every factor of production must be made to work smarter. Thus, to be able to work smarter for sustainability, Malaysia has to move to knowledge economy as soon as possible. Academic institutions, which are involves in knowledge-intensive activities must also be prepared to face knowledge economy. Therefore, they must realize that knowledge is the core resources for them to stay competitive. This paper describes a conceptual framework in adopting knowledge management practices or initiatives in institute of higher learning. It was developed as part of the Knowledge Management initiatives at the University Technology MARA (UiTM). As part of the development of Knowledge Management Center project, it was drawn from the theories and practices of knowledge management that can be applied in academic institutions. The objective of the project is to integrate and monitor university knowledge asset, which we believe is an important aspect to drive UiTM as the preferred university in the region. The*

*project is intended to leverage the university work force and technology as a platform to nurture and support knowledge management activities.*

## Keywords:

*knowledge management, knowledge economy, knowledge asset; conceptual framework, academic institution; UiTM, globalization.*

## Introduction

According to Drucker (1995), to remain competitive or to survive in the new economy era, organizations will have to convert themselves into organization of knowledge-specialist. In every organization, knowledge often becomes embedded not only in human, documents or repositories but also in organizational routines, processes, practices and norms. Therefore, organization must be knowledge-driven by appreciating the power of knowledge for survival in the k-economy era. Organization's knowledge asset must be managed strategically as to enable organization specialized and current knowledge could be retained, applied, unified and shared throughout the organization.

In the era of k-economy, most organizations including academic

institution start to realize that knowledge is the core resource in order for the organization to stay competitive. This intangible asset is the most valuable resource, which includes the explicit and tacit knowledge of an organization. Organizations' knowledge capital comprises literature (information) and also knowledge in the form of skills and cumulative learning experiences and expertise of the workforce. Webb (1998), states that knowledge management is not only a key function of business organizations in the k-economy era, but it is also relevant and applicable to many other types of organizations. Therefore, academic institution should embark in knowledge management activities to enhance its organizations' wealth.

### **Emergence of K-Economy and Its Impact**

The globalization era of the world economy is not only confined on the globalization of production but also on the globalization of markets. Many firms are dispersing their production either parts or whole of their productions to various locations around the world. National markets are now merging into one big global market place as tastes and preferences of consumers become homogeneous. Rapid developments in transportation and the decline in trade-barriers among nations, facilitated by the development of Information Communication Technology (ICT) leads to an emergence of a new type of economy called knowledge economy.

According to David Abdulai (2001), knowledge based economy is an economy where knowledge intensify and its application to production and to

productive sectors of any country's economy can bring about quantum leaps in growth. A Reports from the United Kingdom Department of Trade and Industry 1998, stated the knowledge-driven economy is one in which the generation and exploitation of knowledge play the predominant part in creation of wealth. Many people associate the K-economy with high-technology industries such as telecommunications and financial services.

According to a research report by Chidambar (1999), in ; '*Knowledge workers revealed: new challenges for Asia*', companies throughout Asia must reform their business management and focus on harnessing their employees' intellectual potential and innovation if they are to achieve maximum competitive advantage.

The emergence of K-economy has caused global competition to accelerate and therefore organizations must have effective strategy in order to gain and sustain competitive advantage. K-economy has lead to a new era that requires organizations to have different work culture, business processes and mindset. These has contributed several issues and trends such as :

- The rise of knowledge workers and knowledge professional – focus on harnessing employees intellectual potential and innovation
- Innovation and creativity - becoming a 'knowledge intensive' economy, through extensive research and development activities
- The Knowledge Organization – the successful organizations in k-

- economy are those that will have a high proportions of knowledge driven workers
- Knowledge Management Practices – practice of knowledge management enable to unify organization's knowledge and 'moving' the knowledge to improve productivity
  - Corporate knowledge center – developing knowledge infrastructure to bridge people and technology centered.

### Knowledge Management Overview

What is knowledge management? To define knowledge management, first we need to understand what is the difference between data, information and knowledge. Data is unprocessed information (raw), which includes facts and figures collected and stored. Information is the processed data that is arranged and presented in a meaningful form. According to Webb (1998), information is the potential for knowledge. Knowledge is actionable information that can be used across the entire organization. The more knowledge an organization possesses, the more it can reduce uncertainties. Davenport and Prusak (1997), refers knowledge as a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information.

Knowledge management is not about building a computerized systems of human capital but it is about the planning and implementation of activities designed to continuously

identify, acquire, apply, share, develop, create, preserve and measure (audit) organization's knowledge assets. Knowledge management is about unifying organization's knowledge. It is about developing the value of knowledge from time to time. It is the ultimate resource that can be applied to implement organization's strategy as well as to achieve our strategic focus.

There are many definitions on knowledge management. The concepts are best defined on how best people use them. There are two tracks of activities as follows:

- IT – Track Knowledge Management or Technologies Centered
- People Track Knowledge Management or People Centered

The IT-track of knowledge management leverages on information and communication technology to unify organization knowledge assets. Today, there are several knowledge management solutions that are being developed and installed to speed up knowledge management practices. As referred by Ow (2001), this track is the first generation of knowledge management focusing on the ICT capabilities in managing organization knowledge assets. On the other hand, the second generation of knowledge management, which is the people-track knowledge management, focuses on the organizational behavioral

approach. ICT is as an enabler and acts as a platform for expediting knowledge management practices.

In addition, Sveiby (2002) agrees that there are two tracks of knowledge management. The first track is the management of information approach and researchers/practitioners in this cluster tend to have their education in computer or information science. They are involved in the development of information management systems, artificial intelligence, reengineering and groupware. This track is a new generation of knowledge management and is growing very fast. On the other hand, the people track which is considered as an old track and not growing so fast, involves those who have their education in philosophy, psychology, sociology and business/management.

This paper will focus on the organization behavioral approach (people track), which defines the central activity of knowledge management is about 'moving' organization's knowledge capital so that it can be used to improve productivity. Knowledge management practices involve activities such as knowledge-identification, knowledge-acquisition, knowledge-application, knowledge-sharing, knowledge-development, knowledge-creation, knowledge-preservation and knowledge measurement.

Knowledge identification is the process of identifying the existing knowledge

and the required knowledge in an organization. Information and communication technology helps to access vast amount of information, but the process of identifying which and where is the relevant knowledge is often the problem. Organizations must know their own abilities, such as expertise and competencies.

Knowledge acquisition focuses on importing knowledge from various sources using as many strategies as possible. Acquiring knowledge can be from external sources such as knowledge of other firms, knowledge of stakeholders and knowledge of products, or from internal sources like keeping track of knowledge within the organization and import the knowledge into new products.

Knowledge sharing is directed towards local problem global solution. A problem in an organization attracts solution from various people who contributed their knowledge towards solving the problem. What matter most in the knowledge sharing process is how fast we share knowledge to solve a problem. For knowledge sharing to happen, the critical condition is the presence of knowledge, either internally or externally, and the distribution of the existing knowledge. Distributing knowledge means transferring knowledge either from one individual to another, or from a particular group to another group. Information and communication technology creates a good opportunity of knowledge sharing and distribution, such as the existence of intranet in a company will help to promote knowledge sharing. Knowledge policy for tagging knowledge is also an important factor.

Knowledge development is concern with the activities of developing new skills, products and ideas. Knowledge development does not only happen through research and experiment in the laboratories, but also in developing new competencies either by collaboration with other organization or within the organization. In a company, the daily activities can contribute to the development of knowledge.

Acquiring, developing and accumulation of knowledge has no meaning unless the knowledge is applied. Knowledge is of no value if it is not applied. Organization can support application of new knowledge by allowing individuals or group to access company intellectual asset. The usage of new knowledge depends on how beneficial it is for the user.

Knowledge creation will happen when the concentrated knowledge in the mind of individuals move to another individuals, later being improvised and published. There are four patterns of knowledge creation that are from tacit to tacit, from tacit to explicit, from explicit to tacit and from explicit to explicit. Tacit knowledge is unpublished knowledge that resides in an individual, where as explicit knowledge is published or documented knowledge.

Tacit to tacit refers to the transfer of knowledge from one individual to another, with the same entrée level. Tacit to explicit is the process of documenting the knowledge in an individual. Explicit to explicit is the process of improving knowledge from a documented knowledge, or a combination of ideas from the documented knowledge to a creation of a

new knowledge. Explicit to tacit is a process of transferring a documented knowledge to individuals.

Knowledge preservation involves selecting, storing and updating knowledge in an organization, and able to retrieve them when needed. Only valuable experience, information and skills need to be preserved. Among the knowledge that should be preserved are knowledge on certain key factors, and to relate it clearly to special problems. The ability for information to be retrieved and the information quality is important. All information stored need to be updated as knowledge is usable in a time frame.

Knowledge measurement is important in assessing whether knowledge management activities are being carried out successfully. Knowledge can only be controlled indirectly by controlling the context in which it develops. Knowledge can only be recorded indirectly and not precisely. Therefore, to quantify precisely knowledge is not possible. It must be measured periodically so that company could improve its performance. An approach to measure knowledge is to measure the indicators of knowledge such as number of best practices that are documented within 3 months, number of mistakes made within 3 months, number of ideas generated within 3 months, time taken for an action to be made when problem being posted on the Intranet.

### **Knowledge Management in Academic Institutions: *The Proposed Concept***

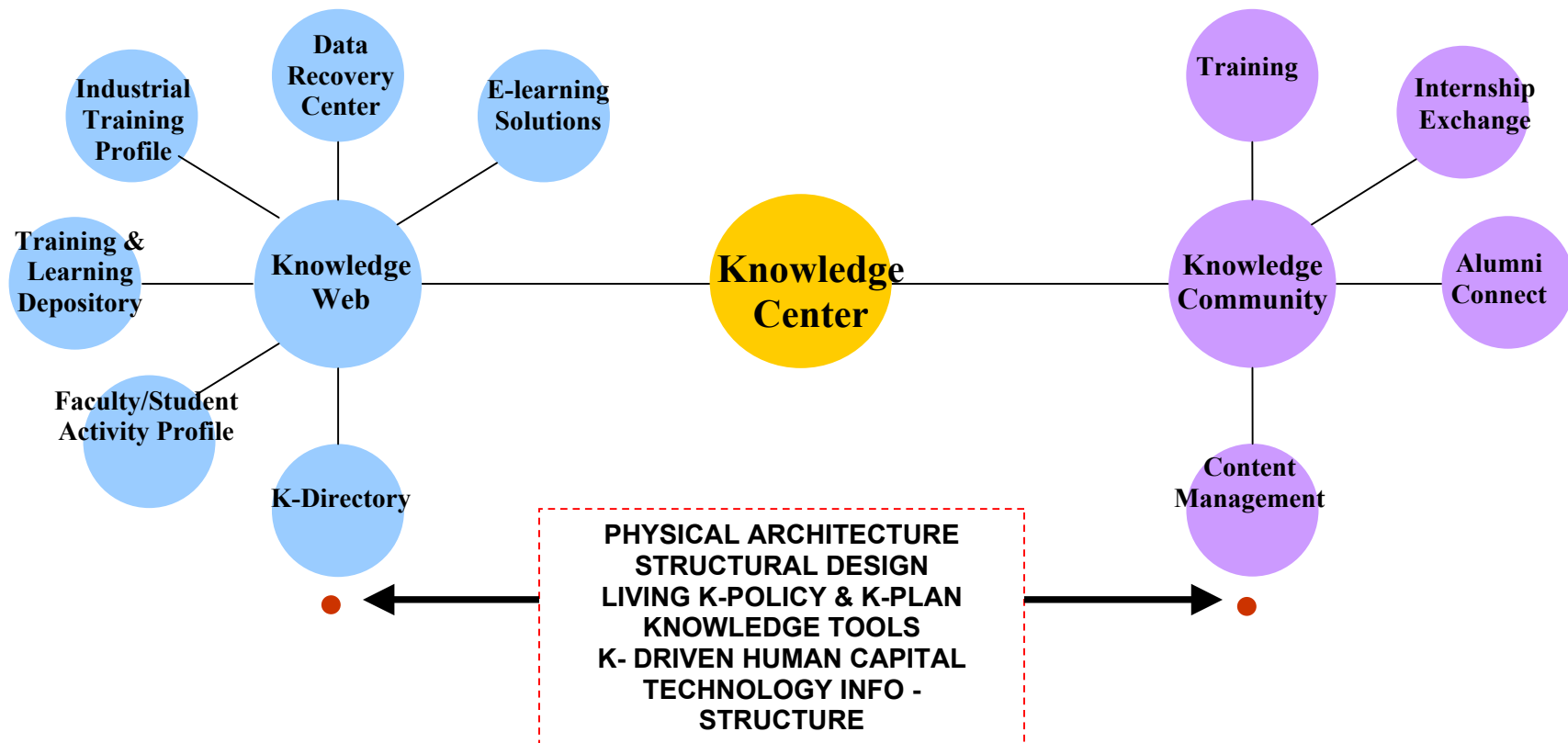
Knowledge is power. Any organization that wants to sustain in the competitive world have to continue to leverage on their specialized knowledge asset and optimize their ICT infrastructure. UiTM is taking seriously every effort to achieve clear goals of its knowledge management activities so as not to run the risk of failure. Our terms of reference for this project are as follows:

- To prepare a strategy for the development of Knowledge Organization in UiTM over the next twelve (12) months
- To foster an environment which is conducive to learning and self-renewal
- Building a more structured knowledge management practices by taking consideration of six distinct features of knowledge management, that are physical architecture, structural design, k-policy and k-plans, k-tools, k-driven human capital and technology information structure
- Nurturing the concept and practice of Knowledge Management
- Unifying the university knowledge assets
- Identifying and sharing best practices in the university business process and administrations
- Promoting UiTM experts across the organization and to the society

The proposed Knowledge Management Center project is composed of two (2) principal components: Human Track Knowledge Management, which we term it as Knowledge Community and Information Technology Track Knowledge Management, which we called Knowledge Web. Because the project site is within UiTM Campus, it

has the potential of being a major knowledge generator for UiTM. The success of this project will hinge on several factors, the key to which is the early development of a comprehensive and practical approach to assess the organization's strengths and weaknesses. Based on our initial evaluations, we would suggest considering the following clusters: **(Refer to diagram 1.0)**

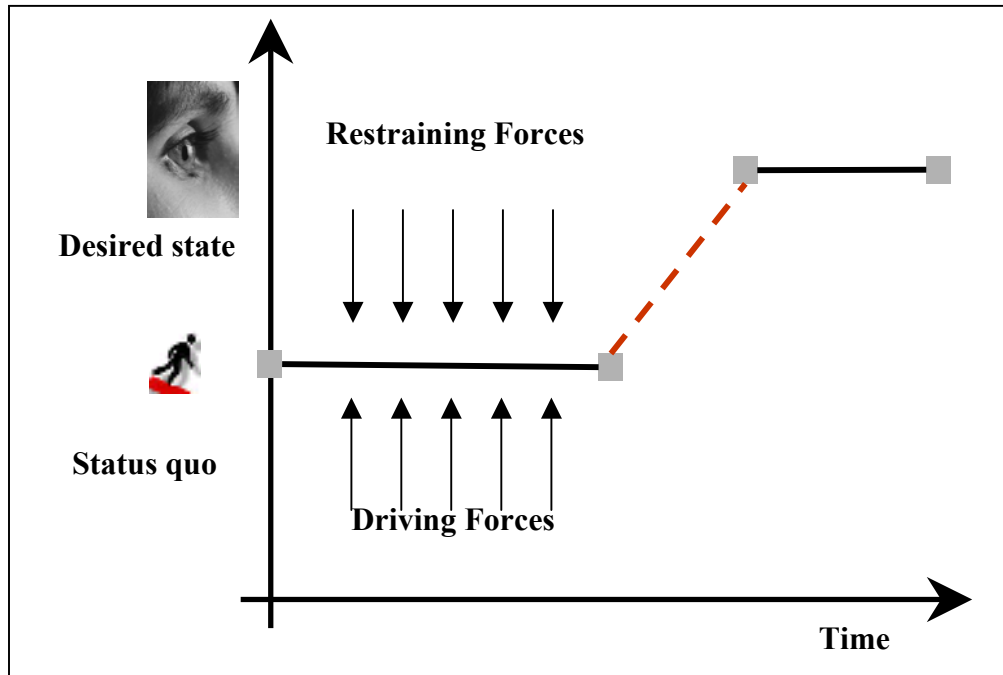
**Diagram 1.0 Knowledge Management Center: *The Proposed Concept***



## Key Challenges and Proposed Solutions

Implementation of knowledge management program is neither easy, nor simple. It is surrounded with numerous challenges and barriers, which

make people slow to accept the importance of knowledge management. They are reluctant to give up the familiar routines that help them through their daily tasks. To them applying new knowledge to means accepting uncertainty.



**Diagram 2.0 : Key Challenges in Implementing KM**

University will have to face several challenges in order to transform itself into a K-driven university. Among other things are:

- Resistance to change
  - It is always going to be difficult task to change the behavior of an organization either to change the entire organization or in parts.
- Different knowledge entry level
  - The diversity of knowledge assets and knowledge users that might results in the delay

- Teaching vs. research
  - Conflict arises due to lack of time, facilities and infrastructure. Overburden with teaching load.
- Support from top management
  - Top management unable to appreciate and lack of understanding the development of knowledge management

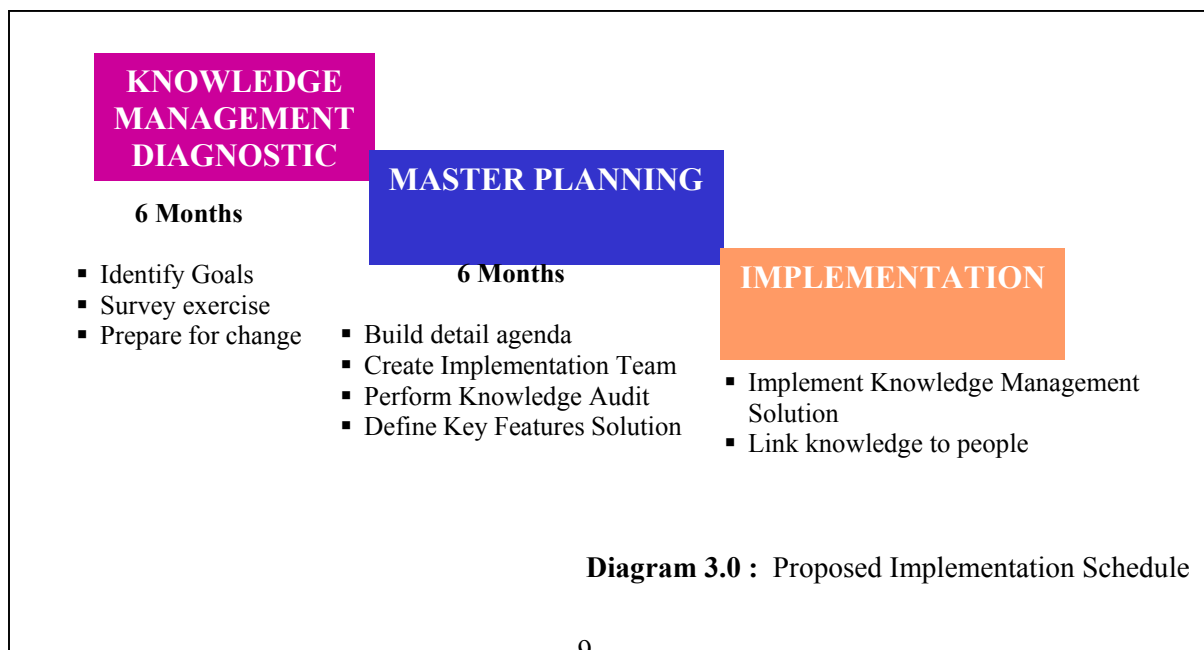
To address the above issues, perhaps one may consider the following:

1. Define the scope of knowledge management initiatives
2. To create awareness and emphasize the importance of K-driven organization
3. Encourage recognizing the importance of experimentation
4. Motivating employees to share knowledge
5. Permit and encourage learning without fear of looking incompetent
6. Demonstrate commitment to their own learning
7. Foster an environment which conducive to learning and self-renewal
8. Developing rewards system for thinking and learning, not just doing
9. To create awareness that a fundamental intermediate purpose of managing knowledge is to create a shared context
10. Create working environment that support the application of new technology, and encourage both individual and groups to access the company's intellectual assets.

### Proposed Implementation Schedule

To ensure efficient and effective knowledge management functions, which are able to meet its objectives, it is essential to establish precisely which activities will be involved. Early communication with and involvement of all those within the organization is essential. Employee will have concerns about any changes, and providing enough information about what is proposed can relieve fears and the way it might work.

The success of this project will hinge on several factors, the key to which is the early development of a comprehensive business plan for the project. Another key factor is the selection of an appropriate development concept. The physical development i.e. the building design of the knowledge management center varies very much on the design concept and scheme that fits the appropriate budget. Based on our initial evaluations, we suggest considering the following:



## Conclusion

As an academic institution the new idea or concept will obviously need mental reorientation. Transforming the culture of an organization of higher learning institution requires great effort from all levels of resources. Knowledge management should be the foundation in every part organization in the era of k-economy. Company must realize that to gain competitive advantage it is not about selling its product to the global market, or keeping track of technological change but to stay competitive is to be able to leverage on its knowledge capital.

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