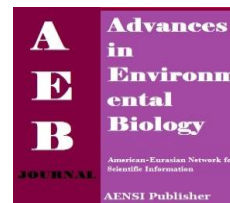




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Awareness of Knowledge Management Among Higher Learning Institutions: A Review

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ABSTRACT

Since the core business industry of higher education institutions involve the dissemination of knowledge and learning, knowledge management is thus deemed as significant in this field. Knowledge management does not only play a role in disseminating, managing and properly utilizing knowledge, the former serves as an essential learning and income-increasing platform for most businesses. Some regard knowledge management as core economy motivation tool or capital. This paper reviews the level of awareness of knowledge management in the higher education institutions as well as other industries, the infrastructures which contribute to the effectiveness of knowledge management as well as challenges faced in implementing of knowledge management in higher education institutions. The paper concludes that effective use and proper maintenance of knowledge management require vital change in culture, values, organizational structures and infrastructures.

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INTRODUCTION

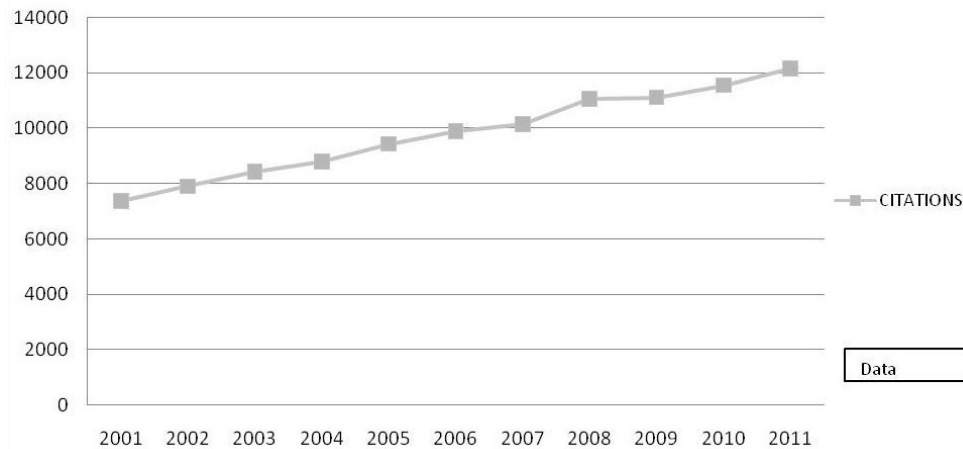
Knowledge management is a field which has been around for the past two decades. It simply means managing information which was transformed from data into knowledge for use and better prediction of future [8]. Higher education institutions play vital roles in disseminating knowledge to not just students but also staff and because they serve as knowledge providers; their main business domain falls in the knowledge category. Thus, information keeping and dissemination are important key factors in an education sector. Higher education institutions offering n programmes by n number of faculties could have difficulties in organizing data and information with regards to the existing students, facilities, systems or projects, libraries, electronic collections of learning materials, e-learning portals as well as student management systems. In order to maintain a constant check on the results and performance of students or even the financial performance of an institution, knowledge management steps in as one of the solutions [1]. In this context, knowledge management plays a fundamental role to make sure that the quality of data recorded is by the organization effectively so that this will significantly help the organization to draw some level of intelligence and store this intelligence for future use [11].

Knowledge management is certainly attracting attention but many researches are still being carried out as to whether knowledge management is being carried out or widely implemented in most institutions. While the latter is still being questioned, there is no doubt that knowledge-based society has arrived and most researches have proven that those institutions which can succeed are those who manage to identify, value, create and evolve their knowledge assets. Drucker [4] in his research has proven knowledge as the only economic resource in the knowledge society, substituting capital or labor. As universities and higher education institutions are deemed to be in the knowledge business, they are ought to be exposed to marketplace pressures to better meet the demand of knowledge dissemination.

Gottschalk [7] mentioned that if knowledge is combined with learning, insights and judgmental abilities, wisdom is generated. While knowledge can be shared with others, wisdom is considered to be too personal and is almost exclusive to that of our own minds and thus when shared might become incompatible with the minds of other people making it meaningless. The graph below shows the increasing number of awareness of authors and research in the knowledge management field.

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Knowledge Management Growth 2001 through 2011



Source: KMWorld Magazine (2012)

This article initiates the thought of deliberating the importance of knowledge management and weighing the popularity of knowledge management in the higher education institutions by discussing different models and reviews of knowledge management processes contributed by different authors. Adaptation of knowledge management in other industries is also discussed in this paper. The former could serve as a better hypothesis to prove the significance of implementing proper knowledge management strategies especially in the higher education institutions.

Definition of Knowledge Management and its Models:

Knowledge management is concerned with the exploitation and development of knowledge assets of an organisation with aims of achieving the organisation's future objectives. Knowledge in this context consists of both tacit which is subject knowledge and explicit which is documented knowledge [3]. Davenport et. al., [3] who studied a number of knowledge management projects and offers some insights into the range and nature of knowledge management projects that are currently being implemented. Their research categorized the knowledge management concept into four different types of perspectives which are to create knowledge repositories, to improve knowledge access, to enhance the knowledge environment and to manage knowledge as an asset.

Other authors have defined knowledge management as a process instead of project-based. Galagan [5] proposed a list of knowledge management processes such as generating new knowledge, accessing knowledge from external sources, representing knowledge in documents, databases, software, embedding knowledge in processes, products or services, transferring existing knowledge around an organisation, using assessable knowledge in decision making, facilitating knowledge growth through culture and incentives and measuring the value of knowledge assets and the impact of knowledge management. Nonaka's [10] concept of a knowledge creating organization is concerned with making individual views available for testing and use by the company as a whole. Knowledge-generating organizations constantly encourage the process whereby personal knowledge is made available to others for them to use to extend their own tacit knowledge base.

Demerest's model is an example of the socially constructed models of knowledge management. The author identifies four phases of knowledge management within an organization; knowledge construction, knowledge dissemination, knowledge use and knowledge embodiment. The model also emphasizes the construction of knowledge within an organisation, with both scientific and social contributions to this construction process. Constructed knowledge is embedded within an organisation through explicit programs and social interchange and from there, the process of knowledge dissemination takes place.

Knowledge Management in the Higher Education Institutions:

Higher education institution for instance adapt to knowledge management by identifying a number of existing facilities, systems or projects. Facilities such as libraries, and electronic collections of learning materials, networks for e-mail communication, and management information systems which provide data on the student profile all contribute to the success of implementation of knowledge management. Metaxiotis and Psarras [9] found out that knowledge management can be better applied in the higher education institution by

creating a flexible and innovative relationship between work and education, helping students to match their talents more closely to their current workplace demands, contributing to the adaptation and assimilation of new knowledge with existing ones as well as contributing to the re-connection of learning with experience.

However, Laal criticized that most of the higher learning institutions in Malaysia have not created a proper mechanism to allow knowledge sharing unlike what most business organisations have done. This could be due to the lack of expertise. The author also thought that the knowledge sharing culture in Malaysia especially in the higher education institutions are still at minimum level. The author stressed that this matter is critical and should be cultivated from as early as possible or soon we will not be able to use the valuable knowledge that we had. Songsanyos who did a comparative study review on the knowledge management in higher education institutions in Chiang Mai, Thailand is to develop better quality and effectiveness, human resources at all levels and to develop knowledge-based of organisations towards the enhanced knowledge investment of the organisations. The author stated that effective performance can be enhanced through explicating tacit knowledge and that leadership and vision of management level are a critical success factors of knowledge management.

Carrillo *et al.*, [2] developed a 3-stage framework for improving management performance through knowledge transformation (IMPaKT); stage 1: business improvement plan with performance targets and measurable indicators to assess performance, stage 2: knowledge management strategic plan with a set of initiatives and implementation tools to support business improvement and stage 3: evaluation of the impact of knowledge management initiatives on business performance (cause-and-effect map to assess contribution of knowledge management, assess the P(success) in performance improvement, identify cost components for implementing each KM initiative, choose appropriate methods to assess impact of each knowledge management initiative, prioritise knowledge management initiatives based on 2 measures of performance).

Rahimi *et al.*, [12] who did a study on the relationship between knowledge management process and creativity among faculty members in the university indicate that there is a positive and significant relationship between knowledge management process dimensions and creativity. In addition, there is no significant difference between faculty members' knowledge management process considering the variables of age, gender, and field of study, besides there is no significant difference among faculty members' creativity considering age, field of study, and employment status. Sedziuviene and Vveinhardt [15] concluded that management of knowledge is given two main tasks i.e. to use knowledge effectively and to create new products and services and sums up learning in three main blocks i.e. learning before, learning during the process and learning after in their study on paradigm of knowledge management in higher education institutions. A study by Ramachandran, Chong and Ismail [13] provides evidence that the six knowledge management processes which are knowledge creation, capture, organization, storage, dissemination and application are moderately practiced by the institutions surveyed in their study. They also found out that there are vast differences in the overall practices of knowledge management processes among public and private higher education institutions.

Adaptation of Knowledge Management in the Industries:

Many industries are adopting different strategies of knowledge management in their business as part of improving their business performance. To the surprise of many, the adoption of proper and compatible knowledge management model actually serves as a better "profit generator". Songsanyos found that knowledge sharing of both governmental institute and private is practiced at a moderate level. Schulte *et al.*, [14] discussed in his research on the importance of knowledge management as an effective business practice and to assess how this performed in the field of occupational hygiene. He managed to prove that knowledge management techniques could be used in the practice of occupational safety and that knowledge storage is the function of standard operating procedures, company guidelines, textbooks, databases and others with some having discrete lifespan and needs occasional updating. However, there are still limitations in the knowledge field such as little attention given to dimensions of knowledge resources, no standard way characterizing influences on the conduct of knowledge management and no individual management framework which incorporates to others.

A study on the effect of organizational characteristics on interdepartmental knowledge sharing in the public sector organisations by Ghent and Buelens [6] showed that structural equation modeling reveals the importance of lateral coordination and trust. The authors in their research also proved that the combination of power games and informal coordination seems to be remarkably beneficial for knowledge sharing. Furthermore, compared with other public sector organizations, government institutions have organizational characteristics that are less beneficial for knowledge sharing. Even in the global food system network, knowledge is becoming recognized as a strategic asset of a firm, knowledge and the management of it is emerging in the contemporary analyses as a potential source of competitive advantage [16]. The author also came out with two theories which are related to knowledge management; transaction cost and resource-based theories of the firm. The analysis here also relies on a clear distinction between the broader concept of intellectual capital and the narrower concept of intellectual property. Firm strategy may involve exploitation and exploration. Managing innovation implies the creation and commercialization of new knowledge.

Conclusion:

There are still rooms for improvement which could lead to the development of the many more knowledge management framework and processes. The awareness on the essentials of knowledge management is still a concern among many organizations, particularly the higher education institutions which play vital role in knowledge sharing or better known as knowledge-intensive organisations. Many researches can only serve as a guideline in formulating strategies on how to properly implement and manage every individual organisation's knowledge management process. The underlying statement is still dependent on the other critical success factors of knowledge management implementation in any particular organizations as each organization adopts different managing styles and systems. As such, further study and discussion on the former could be done in depth.

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