Assessing Knowledge Management Implementation at Two Major Lebanese American Universities

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Abstract: The knowledge-based economy is a reality. Today's global economy categorizes knowledge as the *most important corporate asset* as it improves an organization's fundamental ability to compete. Higher education institutions are no different in this respect. We present an overview of knowledge management. We focus our discussion on two major American Lebanese Universities to describe their KM initiatives and stages of implementation. Finally, we discuss the findings of the study and their implications.

Keywords: Knowledge management, sustainable competitive advantage, Information and communication technologies (ICT), and knowledge management assessment.

1. Introduction

A new era has started, the knowledge era, which is expected to have a radically different outlook and which will need an remarkable business scope (Van Buren, 1999). During the last decades, the practice of knowledge management (KM) has developed into a central management topic all over the world (Wigg, 2002). KM is being tackled by an extensive selection of academic literature and common press. KM is still getting substantial notice, from both academics and practitioners (Kakabadse, Kakabadse and Kouzmin, 2003). To overlook the progression of KM would be to overlook the importance of knowledge in the economic, social, and technological context of the 21st century (Morrow, 2001).

The KM thinking a mixture of has affected field disciplines specifically philosophy, social science, management science, information science, knowledge engineering, artificial intelligence, and economics. Promoting the creation, sharing, and leveraging of the organization's knowledge regard KM regarded as an increasingly important discipline.

The knowledge revolution or even evolution has not truly influenced the main processes of learning and teaching in Lebanese business schools. Even though many corporations, industries and economies worldwide have made or have started a shift into the knowledge age, the Lebanese educational system has been left behind in the industrial age. While universities produce and acquire knowledge, they are hardly ever successful in implementing that knowledge into their own activities (Garvin, 1993). KM has proved to be a distinctive and competent field to exploit facing the increasing competitive pressures in the business schools, being mainly used as a means for altering the educational processes.

Our purpose is to assess the application of KM and the strategies that promote its use in the Lebanese Universities. This study focuses on the diffusion of KM into the Lebanese Universities by investigating the use, importance, and current initiatives of KM in Lebanese Universities. We begin with an overview of knowledge management followed by a description of KM assessment and strategies. We then present an overview of the educational climate in the Lebanese Higher education institutions. Next, we present the study methodology. In the last section, we offer a summary of our findings, research implications and a conclusion.

2. Knowledge management (KM) defined

As we progress from the industrial age to the intelligence age, knowledge has developed into a vital strength behind the success of firms. Knowledge is an important asset for firms in the modern economy (Sambamurthy and Subramani, 2005; Drucker, 1999).

There is a general acceptance that sustainable competitive advantage in the 21st century will be accomplished thru KM. As stated by Porter (1999), we can generate competitive advantage when we make hard choices regarding what we will do and not do. Barney (1991) specified that a firm have a competitive advantage when it implements a value creating strategy before any other current or potential competitor implements that same strategy.

Knowledge management (KM) is not a fantasy. It is not a trend nor is it an agreed solution (Morrow, 2001). KM is a growing field of study. It corresponds to a method of managing and acting, which to be successful, should be integrated and rooted in the organization's strategy, people, processes, and culture (Morrow, 2001). KM programs are not a simple solution. Many programs have failed (Baum and Silverman, 2004; Kautto-Koivula, 1998; Lucier and Torsillierii, 1997; Pfeffer and Sutton, 1999; Storey and Barnett, 2000).

A large number of definitions for the term "knowledge management" (KM) have been proposed by scholars, and researchers from various backgrounds. Knowledge management (KM) is not about managing technology alone, but is about managing how humans can share their knowledge effectively, using technical tools where appropriate (Coakes, Willis and Clarke, 2002; Lehaney, Clarke, Coakes and Jack, 2003)

The KM process involves a reliable, fast and rapid access for capturing, processing, storing and sharing of data, information and knowledge. The KM strategy is giving accurate data to the right people at the exact time while helping them to share and place information in ways that ensures the enhancement of the organizational performance (O'Dell and Grayson, 1998).

3. Knowledge management assessment and strategies

The systematic analysis of the organization's current knowledge management capability is known as Knowledge management assessment. This type of assessment does evaluate anyone or an individual against the world-class practice and it identifies critical areas for applying knowledge management. It points out the areas in your organization where knowledge management is needed. The process as to "how" to apply the assessment is in a cyclical form (Refer to Figure 1)
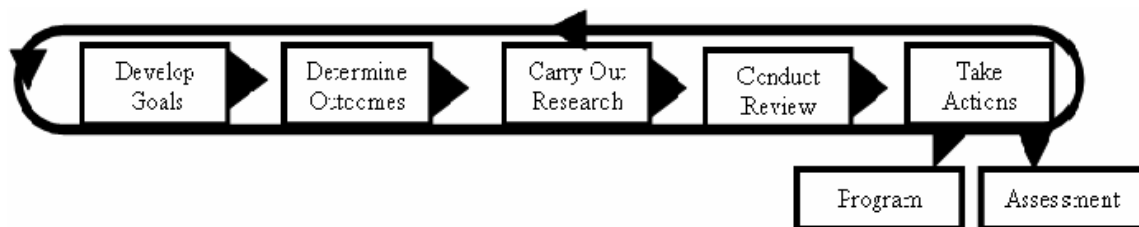

Figure 1: KM assessment cycle

KM assessment is intended at evaluating the necessity for KM solutions, the knowledge these solutions can help discover, capture, share, or apply, along with the influence they can have on individual or organizational performance. A KM assessment can help establish the baseline for implementing those KM solutions, including the existing infrastructure and technologies that can help support those efforts (Becerra-Fernandez, Gonzalez and Sabherwal, 2004).

As higher education institutions strive to become knowledge-based, they need to meet the challenges of harnessing knowledge and information to sustain competitive advantage. Effective KM strategies enable organizations to link KM to strategic business goals, gain senior leadership buy-in and support, implement effective KM solutions, and address people, process, content and technology issues (APQC.ORG)

Several key strategic enablers must be used to improve organizational performance. These enablers (culture, leadership, technology, and measurement) work together to streamline and enhance the capture, flow, and transfer of an organization's data, information, and knowledge.

4. Overview of the educational and information technology climate in Lebanese higher education institutions

The education pyramid classifies the higher education at its head. The higher education establishes to a great degree the status of the country's education system, particularly its value. Per se, this pyramid owes accountability to both the entire education system and to the whole society. Higher education has a significant function to perform through its graduates. These graduates have to put forth several functions. First, they ought to present educational leadership roles as researchers, teachers, consultants and managers. Second, they ought to generate and utilize new information and innovations. Finally, they ought to offer analytical perceptions on problems development and service to both public and private sectors (Sanyal, 2001).

Over the last decade in the United States, Europe and particularly in Lebanon, there has been a growth in support for the use of technology within teaching and learning in higher education. Lebanon aims to regain its title as "the financial hub of the Middle-East". Lebanon holds a unique advantage over other neighboring countries. Most of Lebanon's infrastructure was destroyed by the civil war and the country had to rebuild its telecommunications infrastructure using the latest technologies like fiber optics. Information and communication technologies (ICT) are a mainstream issue in higher education. The same broad definition of ICT could be taken to include radio, television, satellite, fixed and mobile telephone, fax, computers and CD-ROMs and the Internet, as used by institutions or groups (http://www.imfundo.org/Advisory/basicedu.htm*).* The information and communication technologies (ICT) usage is now seen as both a requirement and an opportunity and therefore can lead to competitive advantage. Out of 43 licensed private universities and one public university in Lebanon, 13 universities offer ICT-related programs. There is noticeable change in the teaching methodology that involves a transfer from teacher –centered learning to student-centered learning.

5. Methodology

The research is designed to investigate, assess and explore whether or to what degree Lebanese universities use KM.

The population selected for this study was 2 private universities. The participants included professors, chief officers, vice presidents, deans, directors, and other members from the IT departments.

APQC has determined five essential steps to obtain end results from KM efforts
The major research instrument used in this survey was the American Productivity and Quality Center (APQC) road map to KM results: stages of implementation: Where are you now? The instrument is composed of thirty-one questions divided among five sections. The first section is where you get started; the second is about developing a strategy. In the third stage you design and launch KM initiatives. The fourth stage is about expansion and support, and the last deals with institutionalizing KM pertaining to the current stages of KM implementation in each university. Each section of the survey encompassed a set of five or eight questions. If one or more of the statements within each stage are true, your institution may be placed in that corresponding stage of implementation. Data were analyzed using the statistical package for the social sciences (SPSS) version 11.5. The analyses included descriptive statistics and conventional inferential statistical methods.

6. Results, discussion and research implications

A summary of the characteristics of the respondents is displayed in table 1.

Learning where you are is the principal central task all along the path to knowledge management success. Table 2 presents the frequencies of the people who answered 'yes' to the questions within each stage among the first sample from University 1.

Table 1: Demographic and Personal Data

Table 1		
	Frequency	*Percentage(%)*
Gender		
Male	57	53.8
Female	49	46.2
	106	100.0
Position		
Business	48	45.3
IT	40	37.7
Humanities	12	11.3
Computer Science	6	5.7
	106	100.0
University		
Univ1	72	67.9
Univ 2	34	32.1
	106	100.0

Learning where you are is the principal central task all along the path to knowledge management success. Table 2 presents the frequencies of the people who answered 'yes' to the questions within each stage among the first sample from University 1.

Table 2: Frequency distribution for university 1 (Sample 74).

Stage:	Frequency	Valid Percent
Stage 1	32	44.44%
Stage 2	17	23.61%
Stage 3	6	8.33%
Stage 4	6	8.33%
Stage5	11	15.27

Table 3 presents the frequencies of the people who answered 'yes' to the questions within each stage among the second sample from University 2. After inspecting the tables, we may conclude that university 2 is ahead in its KM initiative, even though the small sample size may have influenced the results. For both universities, however, we notice that KM has surfaced as an area of interest and both universities have moved to stage 2 where the main aim was to devise a business strategy that fits each institution's business model. At stage 2, both institutions have attained a turning point and they both can start to uncover how KM will work for their business given the support of an executive sponsor. During stage 2, a KM task force is chosen, select pilots

are instigated and sources to assist the pilot are secured. On the other hand, University 2 is embarking into stage 3, where the major objective is to conduct successful pilots and offer particular indication of KM business value along with the capture of lessons learned. While stage 4 entails escalating KM initiatives throughout the institution, stage 5 seats the institution among few exclusive companies who have achieved this stage of institutionalised KM.   To sum up, we conclude that institution 2 is ahead of institution 1. Institution 2 is moving towards all the five stages too.

Table 3: Frequency distribution for University 2 (Sample 34).

Stage:	Frequency	Valid Percent
Stage 1	25	73.52%
Stage 2	19	55.88%
Stage 3	12	35.29%
Stage 4	16	47.05%
Stage 5	12	35.29%

For institution 1 to progress and attain a certain level of KM improvement, the researchers recommend that the institution follow the following guidelines:

- Institution 1 should find the resources (i.e. skilled staff members) to support the pilot and thus facilitate the KM initiative.

- Moving from stage 2 to stage 3 requires designing and launching KM initiatives. Institution 1 should start funding the pilot, holding pilot measures and indicators in place and a system for tracking and reporting them, and finally mapping out a strategy to expand these pilot initiatives across the organization.

- Institution 1 should develop an expansion strategy (i.e. applying the pilot selection criteria), the exposure of the KM initiatives throughout the organization by communicating and marketing the strategy, and finally managing the growth by keeping all the resources organized, consistent, and easily accessible.

- The final recommendation would be for institution 1 to recognize that KM is a business plan forming an integral part of its business model. The fifth stage is then realized when KM is embedded in the business model through embracing it in the mission statement, management model, or even in the assessment process.

7. Conclusion

The dynamic changes in the economies of the different nations around the globe have been treated differently. The creation of an economy whereby knowledge-based industries are the leading industries is the goal of government policy in many countries (e.g. the UK, Singapore, The U.S.A., Malaysia and Australia) (Morrow, 2001). We live the knowledge age. Lebanon, and Particularly Lebanese higher education institutions are still in the infancy stage of the Knowledge management evolution. The KM area hasn't been given the attention it deserves so far. Companies and universities are very different organizations. A certain level of cultural tension should be expected and tolerated.

Despite the growing global interest about the strategic perspective on knowledge management (KM), the potential benefits provided by KM in Lebanon are still not fully understood and there is a lack of interest in making a step to appreciate them. There are numerous challenges that confront the improvement of KM education and applicability within the Lebanese market, and some effort is required from IT researchers interested in KM to face them. The authors are attempting to bridge this gap. Careful attention needs to be also paid to the role that KM will play in the organization,

and the design of the KM system to complement existing work processes so as to make its future users familiar with the benefits it will provide them in their daily jobs.

KM assessment can be classified according to the following aspects: (1) when is KM assessed, (2) how is KM assessed, and (3) what aspects of KM are assessed? It can be helpful at the start of a KM initiative, following a strategic review or after an initial phase of KM activities where the potential benefits have not yet materialized. Even though the knowledge management assessment provides a diagnostic of the current practices and a benchmark for improvement, more research is needed to advance the KM field within the Lebanese market.

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