



كلية دبي للإدارة الحكومية
DUBAI SCHOOL OF GOVERNMENT

Knowledge Management in the UAE's Public Sector: The Case of Dubai¹

Mhamed Biygautane
Dubai School of Government

Khalid Al-Yahya
Dubai School of Government

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Abstract

The purpose of this paper is twofold. First, it highlights the importance of creating, capturing, documenting and disseminating knowledge within public organizations. Second, it presents the factors that influence its implementation within the context of public organizations. Using a dataset collected from Dubai government entities, the study assesses the clarity of the knowledge management (KM) concept in the sector, its ability to capture and store knowledge, and the reasons and the expected benefits from implementing KM programs. A set of recommendations are addressed to both policy makers and the heads of KM departments not only in Dubai, but for the UAE and the GCC countries. The study confirms that the current challenge facing public sector is not only knowledge development but also knowledge management.

Key words: knowledge management, public sector, efficiency, enablers and barriers, leadership, financial crisis.

Introduction

An organization's knowledge asset has been perceived as a fundamental source of its wealth and success in the current globalizing and competitive environment (Holsapple and Joshi 2000, Riege 2005). (Ananatmula 2007, Nonaka and Peltokorpi 2006, Drucker 1968, Bell 1973, Nonaka 1994). Thus, the field of knowledge management has quickly gained enormous popularity from both the public and private sectors, and a torrent of research projects have been produced especially on how to foster the creation and sharing of knowledge within organizations and how to implement systems that can protect this knowledge from loss in today's workplace that is very mobile and diverse (Alavi and Keinder 2001, Gu 2004). As Scarbrough et al (1999) states, an enormous number of articles on knowledge management have appeared in academic and practitioner journals, and private and public organizations increasingly realize its importance and attempt to implement KM programs and strategies (OECD 2003, 2007; Kluge et al 2001, Ruggles 1998). However, until the outburst of the recent financial crisis, knowledge management gained less attention in the Arab world and there is a clear dearth in existing research on this topic in the MENA region (Skok and Tahir 2010, Mohamed et al 2008). Therefore, this research is an attempt to fill this gap in the existing literature by conducting a comprehensive study on knowledge management in the context of Dubai's public sector.

Knowledge Management is not a new phenomenon per se, but it has only recently emerged as an explicit area of enquiry for managing organizational knowledge (Wiig 1997). Throughout the annals of history, knowledge has been transferred progressively from one generation to the next, mostly through informal channels. Wiig (1997) traces back the origins of knowledge transfer and sharing practices to the nomadic people who used to make sure that they transfer skills of hunting to each other to maintain the sustainability of their groups. Moreover, Gupta et al (2000) state that there always has been normal practice for good managers to use the "know-how", the skills and experience of their employees for effective management of their institutions.

Nevertheless, it is only during the last two decades that KM has become a systematically, methodically and explicitly developed field. Since early 2000, governments in developed countries, particularly members of OECD implemented many initiatives to encourage the utilization of knowledge in their work organizations. These countries also conducted annual surveys of their public and private organizations and found that KM is a key driver for organizational effectiveness and competitive advantage and an effective way to address economic problems including losses related to high turnovers and retiring workforce. Organizations which have seriously examined their utilization and sharing of knowledge have discovered that they possess more knowledge than they realize (OECD 2003).

The recent global economic and institutional performance problems have triggered a serious debate about the capacity of both government entities and private sector firms to develop, incorporate and manage human capital and knowledge resources in a more strategic and sustainable manner. The GCC² countries have historically

² GCC countries include Bahrain, Kuwaiti, Oman, Qatar, Saudi Arabia and United Arab Emirates

faced critical challenges related to the formation and management of knowledge: the shortage of national skills and knowledge resources, the continued need for investments in these resources, and the reliance on large number of foreign workforce and firms to fill the national skill-knowledge gap and to shoulder the implementation of ambitious economic development goals. In part, the region was able to afford this due to abundant financial resources, improved working and living conditions, and greater integration into the global economy.

However, conditions have changed in terms of shrinking budgetary allocations to major expansion projects and human resource development, departure of talent from many sectors, and the quest for workforce nationalization and employment opportunities for locals. This highlighted the limitations of previous approaches to organization and management development activities adopted by both public and private sectors in the GCC region (Al-Yahya 2010; 2009). These new conditions raise many questions about the importance of how knowledge—in its different forms and sources—is captured, organized, stored, disseminated, and used to achieve strategic developmental goals. As illustrated in Arab Knowledge Report (2009), knowledge is a pivotal lever in the service of growth and development. Hence, effective knowledge management is a necessary vehicle for realizing and maximizing the potential of knowledge for sustainable performance for work organizations as well as society at large.

Strategic knowledge management is of vital importance to GCC countries (Mohamed et al 2008, Skok and Taher 2010, Ahmad and Daghfous 2009). Governments have invested generously in developing or attracting human capital and knowledge resources through education, research, and training. In spite of this expansion in human capital resources, recent studies suggest that there has been low return in terms of capturing and transferring knowledge as well as improved performance. One major finding is the prevalent high level of underutilization of knowledge and skills especially in the public sector. Underutilization levels were at 47% in Saudi Arabia, 45% in Oman, and 42% in UAE (Al-Yahya, 2009). This illustrates that almost half of the available skill and knowledge resources is not properly recognized and used for achieving organizational goals. Furthermore, the GCC countries have been fortunate in attracting expertise and talent from around the world that enabled the region to build the basic infrastructure. These sources of knowledge often exist the local markets along with the experiences and knowledge they had gained over the years; leading to considerable loss for local organizations.

Against this background, the study aims to examine the importance of creating, capturing, documenting and disseminating knowledge within public organizations. It also assesses the factors that influence KM implementation within the context of public organizations. This study assesses the clarity of the KM concept in Dubai's public sector entities, their ability to capture and store knowledge, and the reasons and the expected benefits from implementing KM programs. A set of recommendations are addressed to both policy makers and the heads of KM departments not only in Dubai but for the whole UAE and the region. There are numerous lessons to be drawn from this study, which are to be taken as guidelines for future initiatives or programs. The study confirms that it is in the best interest of the UAE, and Dubai's government entities in particular to focus on not only knowledge development but also knowledge management. This requires a review

and enhancement of their strategies to capture, document and disseminate the knowledge of its work force to achieve better performance and ensure that the expertise and competency of their employees remain within the organization even after they have left.

The paper is organized as follows: The first section discusses the research methodology used in this study. The second section clarifies the meaning of knowledge management and the challenges of its definition especially in the context of Dubai's public sector. Then, the processes of knowledge management are presented and discussed within the context of Dubai as well. The following section demonstrates the significance of knowledge management for the sustainability of public organizations and the opportunities it carries for them. The last section deals with the factors that enable or create barriers to effective knowledge management as drawn from the literature and their applicability to Dubai's context.

Knowledge Management in the Public Sector: Challenges and Opportunities

Although KM appeared under the umbrella of the private sector and was designed to maximize the profitability and efficiency of private companies, it was later on borrowed by the public sector that found in it the recipe for safeguarding its knowledge capital. This does not mean that KM is totally new to the public sector (Riege and Lindsay 2006). Reliance on knowledge as a valuable source for effective policy making has been invariably emphasized in most OECD countries since the 1980s, but the recognition and implementation of the systems, structures and tools of KM that has been quite new to the public sector (Friis 2002). As Bridgman and Davis (2004) argue, the more public policies are grounded on scientific and knowledge-based sources, the more likely they are to succeed and achieve the desired outcomes for the government and for the overall welfare of society. When knowledge informs policy, it maximizes the opportunities and minimizes the risks that are normally associated with the implementation of new and untested policies. More importantly, governments today are under severe pressure from their citizenry, who want better quality services, yet with less cost for the taxpayers (McAdam and Reid 200).

Many managerial techniques were introduced to the public sector (which are mostly known as New Public Management practices) to improve efficiency, quality of decision making and responsiveness to the public. Firstly, result-based performance was the main driver to organizational and operational excellence. Accordingly, managers used to emphasize the observable work and quality of output (Wiig 2000). Then, the role of information technology and use of computers added order and efficacy to the performance of public organizations. Due to numerous reasons, including economic, cultural, the waves of globalization and the world shifting to a "knowledge economy" or "knowledge society" (Wiig 1997 and 2000; Arab Knowledge Report, 2009), attention has turned to knowledge management which has become the new key ingredient to organizational excellence. This turned the attention decision makers to the creation of mechanisms and requirements for such a society to evolve and produce the knowledge that will maintain its competitive advantage. The experiences of OECD countries show that knowledge management has become an essential instrument for improving the effectiveness and responsiveness of the

public sector (OECD 1997). Since 2002, OECD has been producing annual reports (based on a comprehensive survey) on the development of KM concept and practice in their government entities. These reports include recommendations that are specifically addressed to the identified challenges that these government entities face. This gives their public sector organizations the opportunity to reform their KM programs and update their practices to suit the international best practice in the field of KM and enhance their outcomes.

Riege and Lindsay (2006) summarized the main drivers for the recent adoption of KM in the public sector. First, effectiveness in public service delivery has been one of the long ongoing objectives that governments worldwide have been trying to achieve. Adoption of KM initiatives would facilitate knowledge transfer and sharing among employees.. Second, improving, developing or updating the existing knowledge repertoires or establish new ones make the existing knowledge within the boundaries of the organization accessible and protected. Third, relying on knowledge to inform decisions and policies would increase the likelihood of their success and achieving the desired outcomes, and would make the decision-making process transparent and coherent. Fourth, increased responsiveness and engagement in partnerships with the public sector will ultimately lead to both higher returns on taxpayer's money and better service delivery.

Wiig (2000) enumerated basically similar reasons to those of Riege and Lindsay for the application of KM in the public sector. Wiig considers effectiveness of public sector organizations and a shift to more informed decision making as the primary objectives of KM initiatives. He looks at KM from a more holistic perspective in terms of its overall influence on public stakeholders. In other words, he does not call for implementing KM programs only for organizational reasons. They should aim at building the society's intellectual capital and involve the public in decision making by transparently sharing with them information and knowledge and giving them the chance to be influential players in the process of policy-making. Wiig (1997 and 2000) repeatedly stresses the significance of involving citizenry in policy making. He states that successful citizen participation in a democratic society relies on the establishment of mechanisms that show the actions of the state and their accordance with the aspirations and objectives of the public. Here comes transparency as a result of sharing knowledge with the public and keeping them informed of the actions of the government and its direction.

Moreover, KM initiatives should aim at strengthening the society's intellectual capacities and developing a "knowledge- competitive "work force. This will ensure leveraging the available knowledge and human capital resources and their best utilization for the overall benefits for society. Similarly, Riege and Lindsay (2006), link effective public policy to the level of public stakeholders' participation and their involvement in the process. The more participatory the public is in the process, the more satisfaction it results in. Yet, it is crucial to take into consideration the variations in the levels of education and awareness about policy issues from the side of the public. Because, otherwise, only a small segment of the society will enjoy benefits from their involvement in the policy making process and the rest could be ignored any role in it. Thus, it is significant for the government to establish channels of communication and dialogue with the public to allow a coherent and easy transfer of tacit knowledge among themselves. As Lesser et al (2000) argues, dialogue is one

of the most effective ways to communicate with people since it is hard for them to articulate their values and opinions indirectly, and also this ensures that equity is taken into consideration when forming policies. Accordingly, KM in the public sector is not only a tool that enhances organizational performance, but also a channel that voices the interests of the public and their concerns and, and enables them to be participatory in the policy making process. All these factors contribute at the end of the day to the overall welfare of society and transparency of the government machinery.

The paucity of research on KM in the Arab public sector is a reality that is hard to deny (Mohamed et al 2008, Skok and Tahir 2010). This is generally due to: high levels of illiteracy, mediocre investments in R&D and insufficient ICT (Mohamed et al 2008). If this situation persists and continuous as it is, this will make the Arab world lag more behind the rest of the world in its strive to shift to knowledge economy. There is a growing body of literature on KM but mostly from a western point of view. Most Arab countries inherited their public administrative practices from their former colonial legacies and face major challenges in making the machinery of the government effective and achieve the desired results and outcomes (Jreisat 2001). Little research has been conducted on the elements that hinder the success of KM initiatives in the Arab region despite the fact that the region currently needs KM more than ever before due to the changing nature of the global competitiveness and the shift to a “knowledge economy” or “knowledge society” in which R&D are the key requirements.

Research methodology

This paper relies on primary data that have been collected from public organizations across the government of Dubai. The first stage of data collection involved personal in-depth interviews that were conducted in several major government entities that have a running knowledge management programs, including Dubai Electricity and Water Authority (DEWA), Dubai Courts, Knowledge and Human Development Authority (KHDA), Roads and Transportation Authority (RTA) and Dubai Police. These interviews were conducted in pairs and intended to help the researchers identify the key concepts and challenges related to defining, planning, and implementing knowledge management programs in Dubai. Structured questions were asked to these five organizations to find out the challenges they faced and also to help in the design of the questionnaire instrument to be used in later stages of the research. The interviews were transcribed, summarized and analyzed by comparing the answers of each organization. This allowed us to identify patterns, similarities and differences in the approach of each organization to knowledge management. This approach to analyzing interviews is found to be reliable and used in qualitative research (Guba and Lincoln 1994, Gummerson 2008, Miles and Huberman 1994).

Second, a comprehensive questionnaire instrument was adapted from the OECD knowledge management survey (2003) other elements related to the local organizational and cultural context were added. Since Arabic is the official language in the UAE, the survey was translated from English to Arabic and the translation was tested to ensure consistency. Then, English and Arabic copies of the survey were mailed to human resource, IT, knowledge management and strategy managers of all government entities in Dubai. The reason for administering the surveys in both

languages is because some managers are non-Arabic speakers and it would give them the choice to fill in the survey with the language they felt comfortable with. After four weeks of mailing the surveys, we faxed these managers a reminding letter and we ended up with a significant response rate of 66%. In general, respondents were asked to state their opinions on statements that described: the sources of information and knowledge, incentives for sharing knowledge, instruments used to share and disseminate knowledge and the challenges of implementing and running KM programs. Answers were mostly on a five-point Likert scale with 1 representing “strongly disagree” and 5 “strongly agree.” To the knowledge of the authors, this is the first study on KM with such a magnitude that targeted the UAE’s public sector organizations.

Knowledge Management: From the Complexity of the Definition to the Elasticity of the Meaning

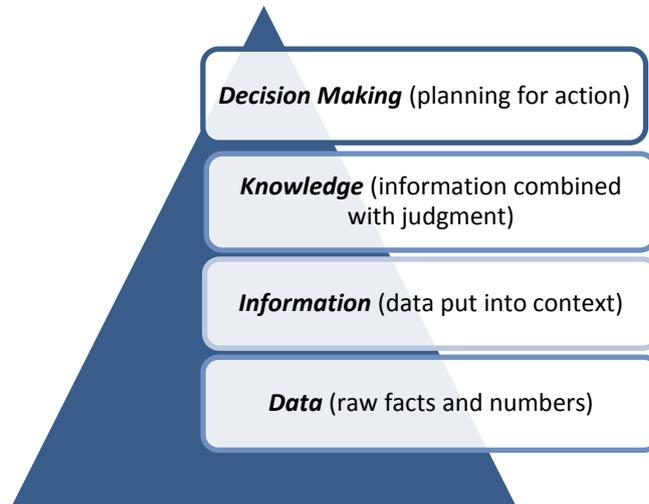
Defining knowledge management has been a tricky and complicated task. The lack of a commonly accepted definition of KM creates considerable ambiguity and confusion about the concept and its significance. There is still no consensus on what the concept precisely means (Cong, Xiaoming and Pandya 2004, Wiig 1997). However, the various definitions in the available literature agree that KM is an ongoing, persistent, purposeful process that enables organizations to create, select, organize, conserve, disseminate and transfer knowledge to achieve its strategic objectives and create value (Allee 1997, Davenport et al 1998). The American Productivity and Quality Center provides a comprehensive definition that integrates the elements of KM process: “Knowledge Management is the systematic process of identifying, capturing, and transferring information and knowledge people can use to create, compete and improve” (APQC 2000). Lai and Chu (2000) define an organization’s knowledge as its professional intellect like its “know-how”, “know-why”, its values and beliefs. Moreover, they argue that knowledge has substantially limited value if it is not shared within the organization. Hence, defining KM has to take into consideration managing the corporation’s knowledge via systematic and organizational means. One of the shortcomings in understanding and experiencing KM is reducing its concept to technical terms as most organizations tend to limit its application to the use of information systems and automation (Hislop 2003). However, KM should not be interpreted in technical terms only. Any definition and implementation of KM should take into account the fact that knowledge is dynamic and social component that is embedded in individuals and social experiences and interactions (Hislop 2002, Anantatmula 2007). KM systems are meant to be a means not an end in themselves. Basically, they are tools to facilitate the capture, documentation and dissemination of knowledge.

From Data to Knowledge

To clearly understand the concept of KM, it is crucial to firstly distinguish the meaning of data, information and knowledge (Nonaka 1994). This will facilitate the task of deciphering the meaning of knowledge and its management in the overall KM discipline. In general the terms data and information are interchangeably used with the word knowledge. This fuels the ambiguity and vagueness associated with Knowledge Management. Figure 1 demonstrates the processes of data’s evolution to knowledge. Data are raw facts; they can be numbers and/or words but they carry no

meaning and present little value for decision making or any other activities (Sebran and Luan 2002). For data to be meaningful, they have to be processed and molded in a certain context. This leads to information, which is an organized and contextualized set of data.

Figure 1: Evolution from Data to Knowledge



Source: (Adapted from Serban and Luan 2002)

Knowledge; however, is “information in action” as O’Dell et al (1998) put it, or “meaning made by the mind” (Marakas 1990). Knowledge without clear meaning is information or even data. Hence, knowledge is the combination of an individual’s judgment, reflection and analysis of the information perceived. The transformation of information into knowledge goes through four processes in the individual’s mind: comparison, consequence, connection and conversation (Davenport and Prusak 1998). Knowledge is necessarily about beliefs, commitment, perspectives, intention and action (Nonaka 1994). The aggregated knowledge guides the decision maker to take the right steps for planning and action.

Tacit, explicit and organizational forms of knowledge

Knowledge is embedded and manifested in various forms. It has been categorized into four main classes: individual, structural, organizational, (Edvinson and Malone 1997) and social/cultural. Most KM publications refer to Michael Polanyi’s (1967) distinction between tacit and explicit knowledge. Individual knowledge (mostly known as tacit knowledge) resides mostly in people’s minds. It is the personal, unspoken and cognitive knowledge that individuals in organizations do not easily share or communicate among each other (Nonaka and Peltokorpi 2006). The salient component of tacit knowledge is “the know-how and know-what” that people acquire through years of experience in a certain organization, yet it is not well recognized, not captured and not documented (Cohen and Levinthal 1990). Moreover, when these individuals (knowledge creators and carriers) leave their organization for another, they take with them this immeasurable and priceless knowledge that they had built over the years. In contrast, structural knowledge (explicit knowledge) is well documented in numerous sources like instruction manuals, books, newsletters and magazines. It is easily captured and codified, easily accessed and shared among individuals. Table 1 clarifies the differences between the characteristics and sources of both tacit and explicit forms of knowledge:

Table 1: Explicit and Tacit Knowledge

	Explicit knowledge (Documented)	Tacit knowledge (Not documented)
Characteristics	<ul style="list-style-type: none"> -Easily captured and codified -Well documented -Easily communicated and shared. -Formal and systematic -Accessible 	<ul style="list-style-type: none"> -Highly personal -Non verbalized and Unspoken knowledge -Difficult to capture and share -Intuitive and unarticulated -Topic specific
Sources	<ul style="list-style-type: none"> -Instruction manuals -Written procedures and books -Data bases and reports -Research findings -Best practices 	<ul style="list-style-type: none"> -Informal face to face meetings and discussions -Personal experiences -Telephone conversations -Emails

Sources: (Bhatt 2001, Serban and Luan 2002, Cong and Pandya 2003)

Organizational knowledge refers to the learning activities that take place within the boundaries of a certain organization and its main components are the tacit and explicit forms of knowledge. The intricate task; however, rests in transforming tacit knowledge to explicit. Tacit knowledge is a fundamental asset to organizations as studies have shown that managers get two thirds of their information and knowledge from informal and formal face to face meetings or phone conversations (Davenport and Prusak 1998). Moreover, the exchange of tacit knowledge provides employees with first hand experiences and ideas about successful or failed endeavors. It fuels their confidence when they conduct a particular task as they learn the mistakes of their peers and they try to avoid them. Finally, the social/cultural form of knowledge refers to what individuals unconsciously acquire through the social or cultural values of their societies. This knowledge affects their attitudes and behavior in the work environment and determines the level of trust bestowed on their colleagues (Nonaka and Peltokorpi 2006). It is crucial to appreciate this form of knowledge to better guide and motivate employees to share knowledge. Hence, the role KM is to ascertain that organizational knowledge is appreciated, systematically organized, maintained and shared. This leads to effective use of the organization’s intellectual capital and eventually contributes to the creation of new knowledge.

Importance of Knowledge Management for Dubai’s public sector

The recent developments in terms of shrinking budgetary allocations to major expansion projects and human resource development, departure of talent from many sectors, and the quest for workforce nationalization and employment opportunities for locals place considerable pressure on public sector bureaucracy’s capacity to function. 66 % of surveyed organizations in Dubai assert that they lose core competencies when their staff members move to other organizations or units. More importantly, Dubai relies heavily on the expertise of consultants who provide “rented

knowledge” to different private and government entities. This knowledge is often lost due to lack of a well structured and developed system of knowledge management.

Implementing KM in Dubai’s public organizations creates benefits and opportunities at both the individual and organizational levels. At the individual level, employees get the chance to share their experiences, knowledge and learn from each other’s mistakes, therefore enhancing performance and improving their skills. At the organizational level, efficiency, quality, productivity and better decision making are the fruition. Organizations witness substantial improvement in both quality and cost of their operations and the satisfaction of the public (Cong, Xiaoming and Pandya 2004). Due to numerous reasons, including economic, industrial and cultural, the waves of globalization and the world becoming a “knowledge economy” (Wiig 1997), attention has shifted to knowledge management which is the key ingredient to organizational excellence.

The interviews conducted with major government entities which have incorporated KM into their organizations like DEWA, KHDA, RTA, Dubai Courts and Dubai Police confirm the above mentioned benefits of KM and also reveal other important insights.

Table 2: Reasons and Desired Outcomes from implementing KM in Dubai’s Government Entities

Entity	DEWA	KHDA	RTA	DC	DP
Reasons and benefits of implementing KM	<ul style="list-style-type: none"> -Fulfill the requirements of Dubai’s Government Excellence Program (DGEP). -Recommended by an external consultancy firm to enhance performance of DEWA -Improve internal efficiency, productivity and service delivery. 	<ul style="list-style-type: none"> -Fulfill the requirements of (DGEP). - Facilitate the communication of knowledge among all the employees. -Avoid overlap in performing certain duties. -Sound Policy making, improving internal decision making and increasing transparency. 	<ul style="list-style-type: none"> -Senior Management introduced KM to: -Capture knowledge through study, training and best practice. -Share knowledge with colleagues within RTA. -Classify, index, store and retrieve knowledge. 	<ul style="list-style-type: none"> -KM existed in DC for a long time and it has been introduced by an internal member of the court. -To enhance knowledge transfer, creation and more importantly achieve organizational effectiveness. -Increasing productivity and quality of service delivery. 	<ul style="list-style-type: none"> -Implemented by DP to create, transfer and share knowledge with everyone within the organization. -It is important to facilitate E-Government initiatives and more importantly to make use of the good practices within the organization. -Facilitating communication between DP and DG

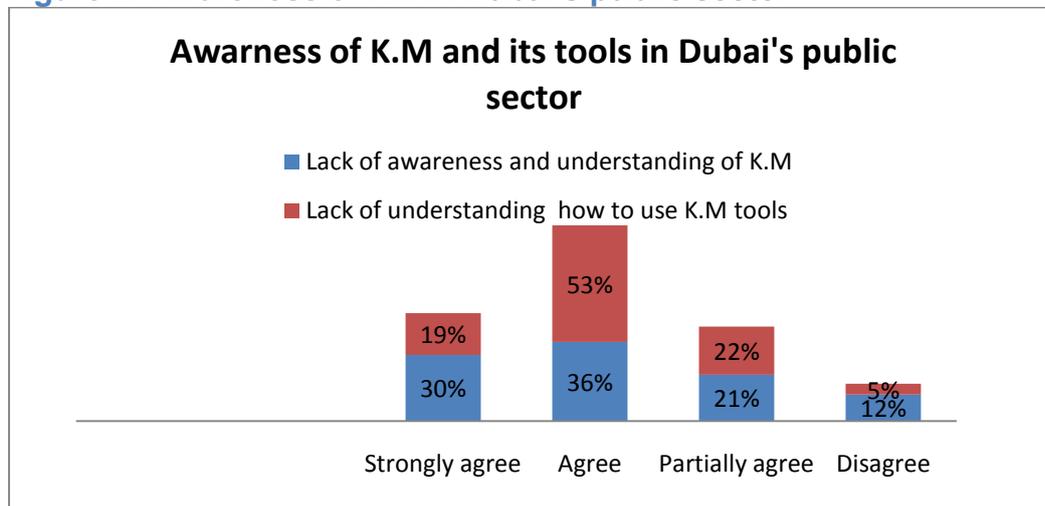
As Table 2 demonstrates, the five organizations have very similar reasons for implementing KM programs. They all aim to enhance their organizational performance, improve internal efficiency and service delivery, facilitate communication among individuals and departments within or outside their organizations and to better store their knowledge capital through proper mechanisms. RTA, DC and DP were self aware about the importance of the KM for

their organizations and implemented it accordingly. DEWA and KHDA; however, implemented the KM program not only for organizational reasons but also to satisfy the requirements of Dubai Government Excellence Program (DGEP) Award which now considers the presence of effective KM tools as one the main criteria for winning the award. The DGEP seems to have succeeded in encouraging public organizations in Dubai to adopt the best practices to enhance their effectiveness and service delivery.

Clarity of the Knowledge Management Concept

Successful implementation of KM programs is contingent on the clarity of the concept to all members in the organization. One of the major obstacles that government entities have faced while adopting KM programs in Dubai is the vagueness of the concept to people. All the interviewed and surveyed organizations indicated this challenge. For example, Dubai Courts states that it was hard to explain and clarify what KM meant to everyone at the courts. It was also more difficult to decide which department should be responsible for it- IT, HR, or others. KM was a new concept for managers and employees alike at the Court.. This created difficulties in implementing the program. But with training programs, workshops and lectures, the Court managed to better clarify the meaning of the concept. Similarly, Dubai Police asserts that the concept of KM is still vague to most employees at the institution despite the incessant efforts to make it feasible and clear. Dubai Police organized workshops and training sessions to inform the employees about the importance and meaning of KM.

Figure 2: Awareness of KM in Dubai’s public sector

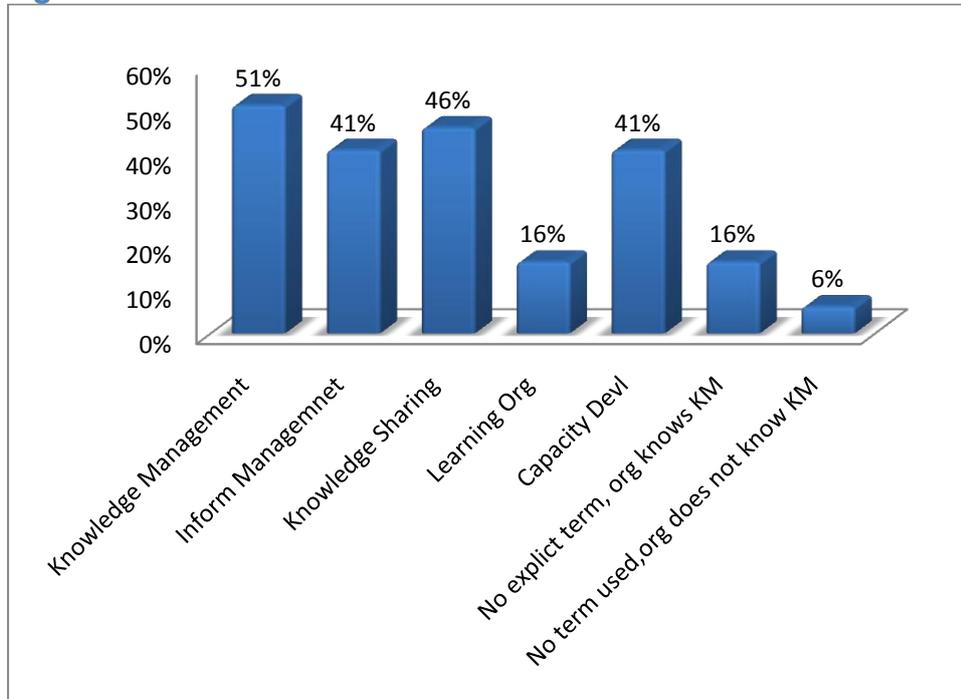


The analysis of survey data shows that when asked about the main difficulties that their organizations faced while trying to implement KM programs, 30% of the respondents strongly agree and 36% agree that lack of awareness and understanding of KM concept was one of the main obstacles (Figure 2). Moreover, 19% of the respondents strongly agree and 53% agree that another challenging factor was lack of awareness on how to use KM tools.

In fact, the majority of government entities in Dubai are aware of KM but refer to it with different terms interchangeably. Figure 3 illustrates that four terms are

predominantly used by these entities in their strategy and general management documents. Respondents were required to indicate which of these concepts they use, and were allowed to choose more than one answer. Results indicate that 51% of respondents confirm that they use the term “knowledge management”, 46% use “knowledge sharing” while 41% indicated that they use “information management” and “capacity development”.

Figure 3: Terms used for KM in Dubai’s Public Sector



Note: These percentages do not sum up because respondents were asked to give multiple answers

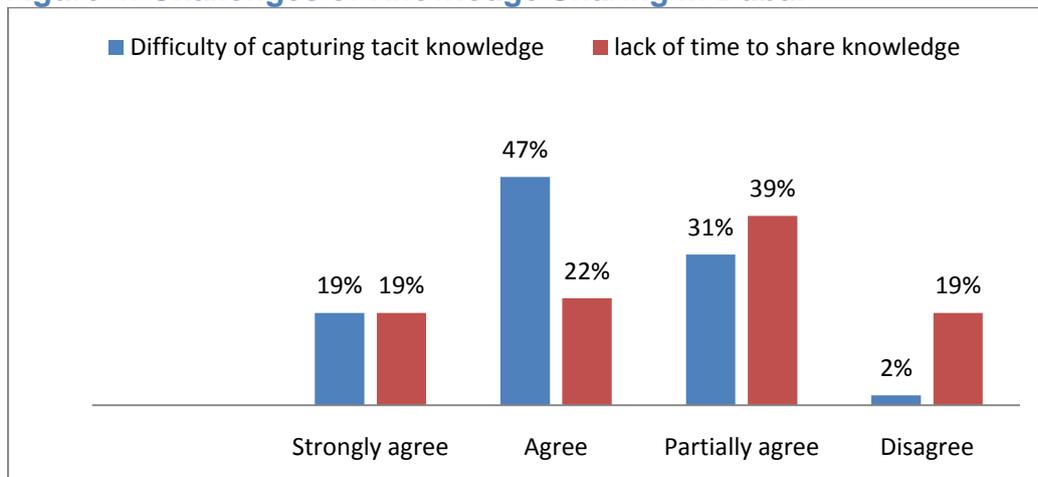
In fact, using these different concepts in such a manner can further fuel the ambiguity and confusion among individuals in the organization and hinder any attempts to foster the implementation of the KM program. Therefore, it is crucial to clearly define what the concept of KM stands for and what each term means

The challenge of capturing tacit knowledge in Dubai

Government entities in Dubai vary in their capabilities and efforts to capture and store their tacit knowledge. Figure 4 reveals that 19% of respondents strongly agree and 47% agree that capturing tacit knowledge is a major difficulty they face in their organizations. Insufficiency of time does not seem to be the driver for this as only 19% strongly agree and 22% agree that lack of time is the reason behind the difficulties encountered while trying to capture tacit knowledge of their employees. The interviewed public organizations confirm the same results derived from the survey analysis. Dubai Police recognizes the significance of tacit knowledge and has established the necessary mechanisms to capture and store it. It adopts the Japanese model in sharing and transferring knowledge within the organization by establishing cross-organizational and self-managing teams, arranging weekly meetings among its employees, organizing workshops and lectures that target specific skills and calls each policeman to share their experiences and ways in which they dealt with a specific issue. More specifically, each Thursday (the last working

day in the week), employees are required to meet for two hours to discuss the new techniques they have learnt and explain them to the newly joined employees.

Figure 4: Challenges of Knowledge Sharing in Dubai



Moreover, policemen are strongly encouraged to write about the new cases they have encountered and how they solved them. Financial incentives are provided for those who regularly write articles about their experiences. In the Police Aviation department, pilots are required to document their experiences and mistakes they make and explain how they solve them. Also, there are regular training workshops where pilots are introduced to new practices and are obliged to use certain manuals that carefully capture details about the most recent techniques in the aviation industry. This allows the transfer of knowledge from the experienced to the less experienced among the police and insures that their tacit knowledge is exchanged among all the employees.

Dubai Courts also adopted several practices to share and store the tacit knowledge of its employees. For example, judges are required meet regularly to discuss the cases they work on and share their experiences and opinions with others especially the new judges. This technique helps the judges learn from each other and more importantly gives the new ones the chance to acquire the skills and expertise of older and more experienced. Moreover, when judges finalize a case and announce the verdict, they are required to electronically store the case details' and explain how they reached a certain decision. This way, when other judges face a similar case, they just look at how the previous judges reached a decision on a similar case and build on that. Other techniques of storing judges' tacit knowledge are through informal seminars, weekly meetings, training workshops and booklets that judges publish frequently. According to the interviews with Dubai Courts, if a judge permanently leaves the court, his knowledge and experience are properly stored and easily accessible by the other judges. The performance of Dubai Courts increased significantly after the implementation of these procedures and; therefore, 86% of the cases are finalized in three months while the remaining 14% are determined within six months.

RTA raised very important points regarding the crucial role of tacit knowledge for the organization. They stated that their heavy reliance on international consultants makes the knowledge created very vulnerable to loss once they leave. Consultants

are a rich source of rented knowledge and if their experiences, observations and recommendations are not well documented then the organization risks the loss of immeasurable source of expensive knowledge. RTA has been trying to establish a system that captures essentially the tacit knowledge of these consultants through different methods like mentoring, coaching and informal meetings. KM champions were hired to facilitate the transfer of knowledge from these experts to the organization and hold two to four hours' presentations weekly to teach employees at RTA how to benefit and exchange knowledge.

DEWA acknowledges that they have no formal internal systems or procedures to capture tacit knowledge due to lack of awareness about its significance among most of the employees. However, the organization recognizes the importance of this knowledge and intends to invest on it in the future. Being a relatively new organization, KHDA think that they still need to focus on developing the capacity and human resources to generate knowledge inside the organization. The next step would then be to create the necessary mechanisms to store the generated knowledge within the organization and set up a solid KM program.

Knowledge Management Processes

An individual's knowledge is essential for developing the overall organizational knowledge. However, organizational knowledge is not only limited to individuals' knowledge (Bhatt 2000, Thomas et al 2001). The KM literature reveals that there are several "interactive" and intertwined processes that construct knowledge management. These processes involve the human, technological and operational aspects that drive the creation, capture, organization, access and the use of knowledge (Serban and Luan 2002, Bhatt 2001). The interaction among these processes has significant implications on the fate of KM initiatives. In fact, these processes cannot be imitated since its organization has its own history and unique characteristics that cannot be copied. Hence, ample attention has to be paid to the context-specifics in implementation of these processes.

Table 3 summarizes these processes and specifies the role of people in collaborating, finding, facilitating and sharing knowledge. Knowledge creation refers to the ability of an organization to generate innovative solutions and ideas (Marakas 1990, 1999). This can take many forms like discovery of new techniques and methods of solving a problem, borrowing certain practices externally and contextualizing and integrating them into the organization. This process requires collaboration, discussions and articulation of new knowledge among individuals. Lynn et al (1996) argue that motivation, inspiration and experimentation play a pivotal role in the knowledge creation phase, and determine to what extent employees share knowledge among them. Bhatt (2000a) argues that knowledge creation does not necessarily mean the creation of knowledge "from scratch". Organizations can always "reconfigure" and put together the pieces of knowledge that exist within the organization based on the strategy of "imitation, replication and substitution". According to Bhatt (2000a), these techniques will allow the organization to identify the existing knowledge, restructure it and create a new set of knowledge. Similarly, Pentland (1995) argues that knowledge creation does not only involve the discovery or invention of new knowledge but also replacing existing content within

the organization's tacit and explicit knowledge. This process involves a "continual interplay" between these two forms of knowledge through four modes of knowledge creation as Nonaka (1994) defines them: socialization, externalization, internalization and combination. They are intertwined models and each relies on the other. The second step is capturing that knowledge and documenting it. This is very critical because most organizations lose that knowledge if they do not extract and store it properly.

Table 1: Knowledge Management Processes

Knowledge Content				
<i>Knowledge</i>		<i>Management</i>		<i>Processes</i>
1) Create -Discover -Realize -Discuss -Articulate	2) Capture -Document -Extract -Store -Represent	3) Organize -Structure -Categorize -Analyze -Catalog	4) Access -Present -Display -Profile -Find	5) Use -Disseminate -Improve -Perform -Learn
<i>Collaborate</i>	<i>Find</i>	<i>Facilitate</i>	<i>Augment</i>	<i>Share</i>
People's processes				

Source: (Adapted from Gartner Research as cited in Serban and Luan 2002)

Research has proved that even if organizations create knowledge, they always risk losing it (Argote et al 1990). Hence, storing this knowledge in what is usually referred to as "organizational memory" is instrumental in safeguarding this knowledge and keeping it visible within the boundaries of the organization (Stein and Zwass 1995). At this stage comes the vital role of technology in codifying and digitalizing the acquired knowledge. Establishing the proper technological infrastructure enables organizations to effectively organize and store knowledge and at the same time create coherent channels for accessing and displaying it. Weiser and Morrison (1998) state that advanced IT tools such as multimedia databases, and data base management systems can play an effective role in improving organizational memory and keeping the organization's knowledge safe from loss.

However, if an organization finds it hard to localize the needed knowledge, in the right time and format or a context in which to utilize it, then it will be very difficult for this organization to benefit from its knowledge repository. Yet, Bhatt (2001) argues, organizations can overcome this problem by training its employees, incentivizing and familiarizing them with the whole process of knowledge management and by showing them ways of how they can be creative in the organization.

The last process is knowledge sharing which Bukowitz and Williams (1999) describe as "one of the toughest nuts organizations have to crack". This stage involves the interaction among the technological, social and human resources in the organization. This explains the complexity of sharing knowledge and the various challenges that rise when organizations try to encourage its employees to share knowledge. Therefore, organizations ought to create an environment which incentivizes and

rewards employees for sharing their knowledge, and also facilitate this task by implementing the required and necessary mechanisms for that purpose.

Knowledge Management processes in Dubai

Dubai government entities differ in institutionalizing and implementing a structured process for creating, capturing, organizing and sharing knowledge which significantly affects the outcomes of their KM programs. Dubai Courts, Dubai Police and RTA have been the pioneers in adopting well established KM processes. DC fosters knowledge creation by incentivizing the judges and employees at the courts to be innovative in handling the cases they deal with. Then, they are required to document how they reached a certain verdict or decision in a sophisticated and well systematized internal portal that encompasses extensive information about everything that takes place within the Courts. Judges have direct access to this portal and can upload their ideas, opinions or suggestions regarding their cases and learn from the experiences of each other.

Likewise, Dubai Police adopts a clear process for its KM program. It adopts the Japanese model to capture, store and share knowledge by frequently organizing meetings, workshops and seminars where the police exchange their experiences and share their knowledge. Creative ideas and new practices are documented in a report that is published every six months by DP and shared among all its departments. Another method to create knowledge is through applied research conducted by student employees. DP strongly encourages and supports its employees to pursue higher education and participate in national or international training workshops to gain new skills and insights. The recommendations of the dissertations and reports produced by these student employees are taken very seriously by DP to improve its efficiency in service delivery.

RTA's knowledge management team developed a methodical Process Framework based on KM Best Practices that aims to capture, evaluate, categorize and share knowledge across the organization. Like DC and DP, knowledge within RTA is captured through trainings, meetings, workshops and personal discussions. Newly created knowledge is then classified, indexed, stored and shared through monthly newsletters and the intranet portal. Also, an electronic data management system (EDMS) was created to facilitate the sharing of documents and knowledge among RTA employees.

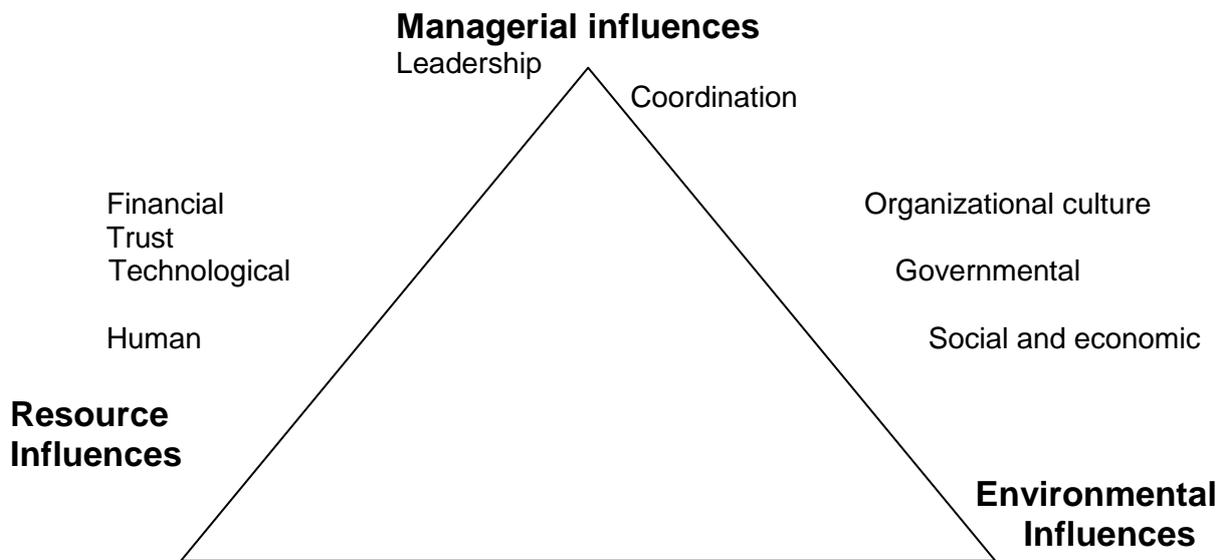
DEWA and KHDA indicated that they have not adopted any institutionalized processes for their KM programs, but they have incorporated many practices to foster knowledge sharing among their employees like holding occasional meetings and organizing lectures and workshops. However, for their KM program to be successful, they should consider implementing focused and systematic processes that will enable their efforts to reach fruition.

Critical Factors Enabling the Success of Knowledge Management

The success of KM initiatives is strongly dependent on some critical factors that must exist within the implementing organizations. There is a growing body of literature that discusses these factors and their role in enabling KM projects to succeed and achieve the desired outcomes. These factors range from leadership (Anatamula

2007, Arthur Andersen 1996), technology (Riege 2005, McAdam and McCreedy 1999), organizational culture (Haydak 1998, Huang et al 2008, Sun and Scott 2005), and financial aspects (Holsapple and Joshi 1999). Basically, Holsapple and Joshi (2000) classified these elements into three broad sets of factors that directly and indirectly determine the fate of a KM project. They are 1) managerial influences, 2) resource influences and 3) environmental influences. Each of these main factors, as demonstrated in Figure 5, comprises of several components that contribute to the overall KM process. This framework is applied to the context of Dubai's public sector to assess the extent to which they play out in the management of knowledge in Dubai.

Figure 5: Factors influencing the Management of Knowledge



Source: Adapted from Holsapple and Joshi 2000

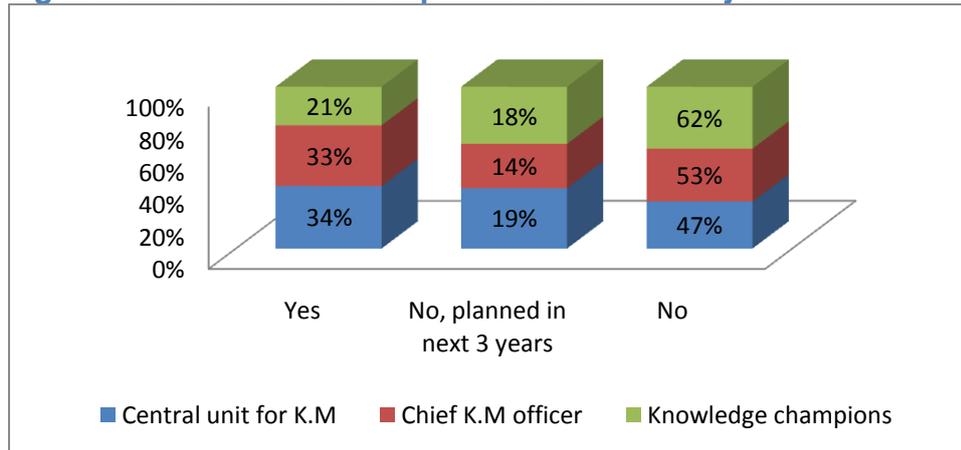
Managerial influences

Managerial influences preside on top of the pyramid for a myriad of reasons. These are the dynamic drivers that fuel the implementation of KM within the organization and exercise the leading role during the process. These influences comprise four elements which differ in their importance and functionality.

Leadership

A study conducted by Anantatmula (2008) finds that selecting a capable leader is the first step organizations should take, even before putting together a plan or strategy for KM program. The important role of the leader resides in effectively approaching and obtaining the necessary support from the top management and in constructing the human and technological infrastructures needed for the KM project. Also, the leader provides the conditions and general atmosphere that allow the processes to operate efficiently. This would be done by empowering and incentivizing individuals to share knowledge, making sure required tools are available and function according to the needs of the organization.

Figure 6: Role of Leadership in Dubai's KM Projects



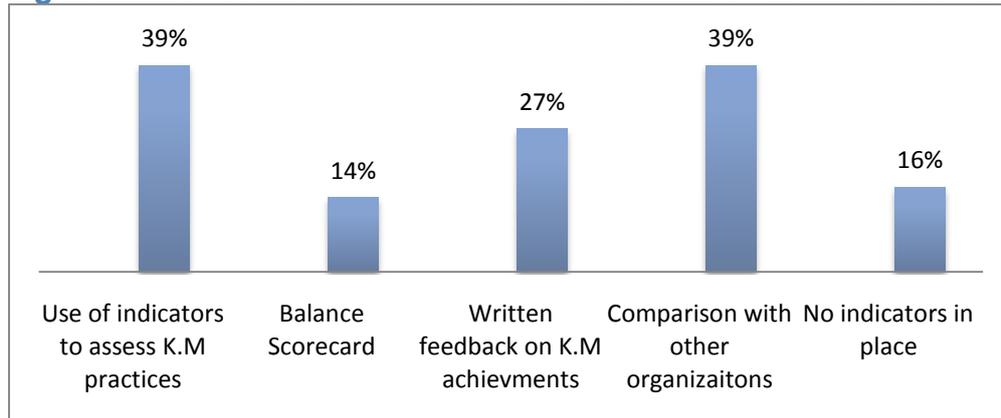
Survey data provides a clear image of the role leadership plays in KM programs within Dubai's public sector. Previous studies indicate that there are three main sources of leadership that can steer KM programs: establishing a central unit for KM, chief officers responsible for overseeing the implementation and effective operation of KM processes and knowledge champions who directly work with employees and facilitate the creation, documentation and sharing of knowledge. In our survey of Dubai public sector, organizations were asked to specify whether they have any of these elements in place. As Figure 6, shows, 66% of surveyed organizations do not currently have a central unit for KM programs, 67% do not have chief KM officers and 80% do not have KM champions. Unfortunately, these results show that government entities in Dubai are not fully aware of the instrumental role leadership plays in driving KM programs and establishing the right environment that will allow them to function effectively.

To explore this issue further, we also conducted a series of in-depth interviews with five organization—RTA, Dubai Courts, Dubai Police, DEWA, and KHDA. Some organizations demonstrated that they have clear direction guided by effective leadership. For example, RTA has nine knowledge champions to lead the implementation and knowledge sharing processes. These champions integrate with the employees and clarify the concept to them, facilitate knowledge sharing and ascertain that the organization follows the right path to make KM an integrative part of the organization. Similarly, Dubai Courts have eleven administrative directors who oversee the progress of the KM programs and meet annually to discuss their achievements and progress. These set an example for other entities to have KM leaders who can help the organizations take the right direction and achieve the desired results.

Control

Control addresses the need to ensure the availability of knowledge resources in adequate quality and quantity, as well as the necessary measures of information security (Holsapple and Joshi 2000). KM programs are responsible for creating knowledge which is accurate, coherent and valid. Moreover, it should be protected from loss and maintained in a way that makes it accessible, yet protected from unauthorized use.

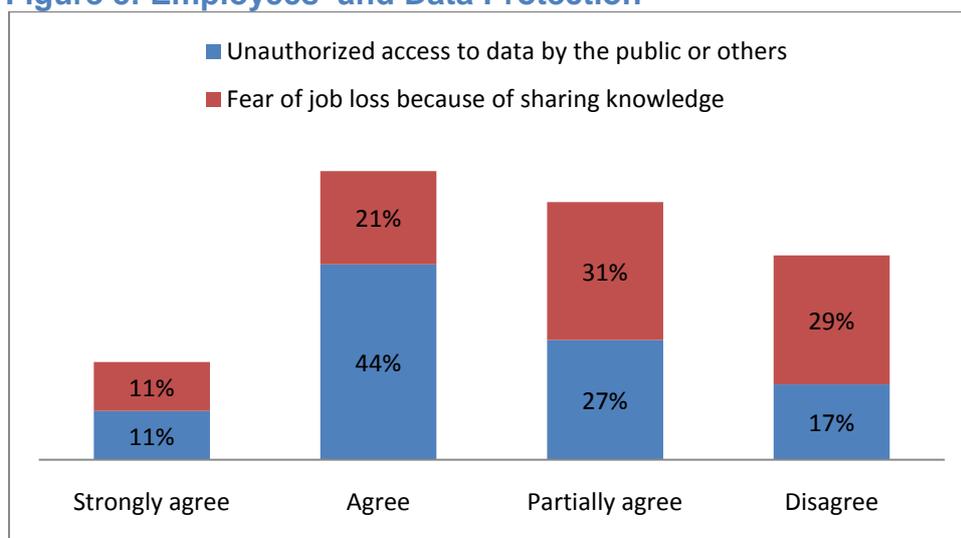
Figure 7: Assessment of KM Performance in Dubai's Public Sector



Therefore, KM programs' performance should be continuously subjected to evaluation. Government entities in Dubai use different instruments to assess the performance of their KM programs. 39% indicated that they use international KM best practices' indicators to assess their practices and to compare between their performance and that of other organizations. Moreover, 27% of respondents rely on written feedback on KM achievements and only 14% use balance scorecard for that purpose. Interviews with Dubai Courts reveal that they rely on surveys they administer annually among all its employees, including judges, to assess the successes, the challenges, failures and opportunities for improvement. The results of these surveys help the Courts realize where they stand in terms of the achievements of the KM program and its progress.

With regards to concerns about the willingness to share knowledge, Figure 8 shows that 11% of respondents strongly agree and 21% agree that they were worried about losing their jobs a result of sharing knowledge. Yet, 11% strongly agree and 44% are that they were worried from unauthorized access to data by the public or other competing organizations.

Figure 8: Employees' and Data Protection



These results assure that the environment of these organizations does not threaten job security if they share sensitive knowledge, but they have not established the necessary instruments to protect their data from unauthorized use.

1) Resource influences

Successful implementation of KM initiatives requires financial and human capacities. Allocating sufficient financial resources for KM projects determines both their efficiency and overall quality. It allows for the establishment of the human, technological and institutional capabilities necessary for the KM program to successfully operate. Public organizations should, therefore, assign a sufficient annual budget for KM, and since knowledge is “a source locked in the human mind” (Kim and Mauborgne 1998), it is imperative to create the necessary conditions and incentivizing mechanisms that will encourage individuals within an organization to share their knowledge.

Financial resources

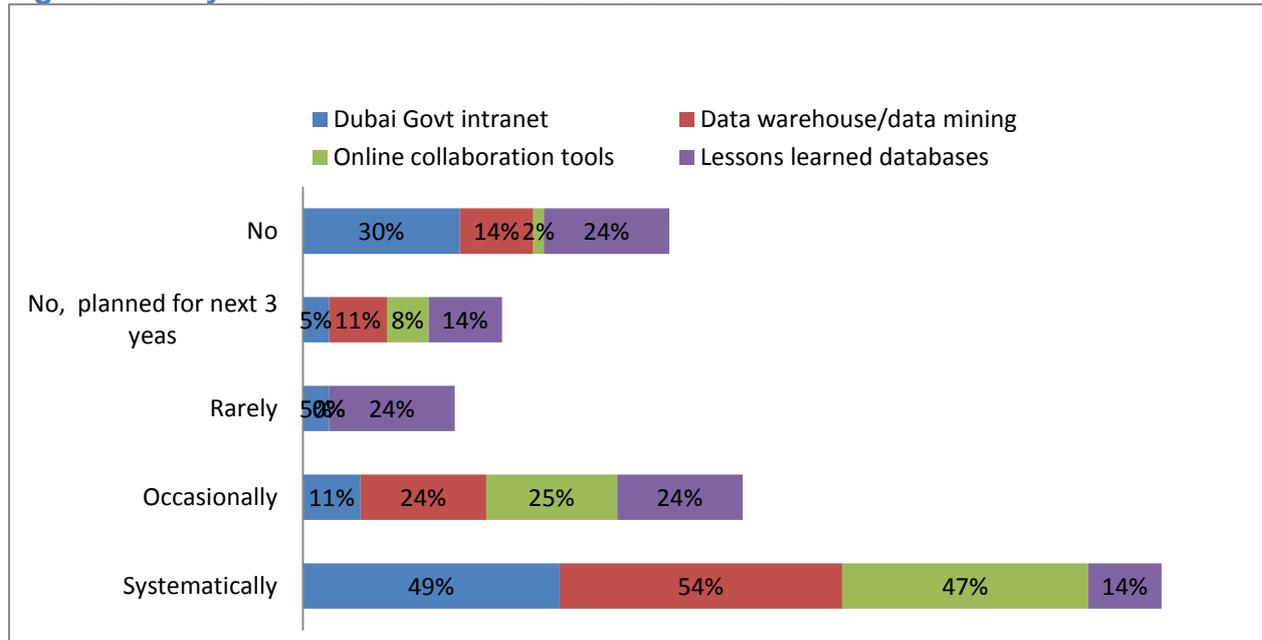
The advent of the global financial crisis has tremendously affected the government of Dubai and resulted in cuts in government spending and reordering of its priorities. This had implications on KM activities in some organizations. One of the areas affected by budget cuts is KM which can potentially affect its overall performance and outcome. Survey data, did not reflect precisely the percentage each organization spends on KM programs because only 7 organizations answered the question related to the budget allocated to KM. Four organizations indicated that they spend 5% of their overall budget on KM, one 4% and two spend 2%. This finding gives little guidance about the current state and perceived importance of knowledge management. However, many surveyed organizations gave high importance to KM in their future work plans. When asked about what they expect to happen to their KM budgets in the coming 5 years. 4% of the respondents said it would increase by 100%, 21% said it would increase between 50 to 99% and 48% said it would increase between 0 to 49%, 8% said it would remain the same and 16% indicated that it would decrease.

Interviews, however, provide a better image of the KM budgetary issues that most public organizations have been facing since the start of the financial crisis. For example, half of the interviewed government agencies stated that the budget they allocated for KM programs was significantly cut due to the budgetary restrictions caused by the crisis. This limits their capability to organize workshops, provide training for their employees and even translate KM material from English to Arabic.

Technological resources

After capturing and codifying data comes the task of documenting and storing it. The availability of the necessary technological instruments for this purpose is an instrumental element for the overall success of KM programs.

Figure 9: IT systems for KM in Dubai's Public Sector



Survey findings indicate that Dubai government entities rely on sophisticated I.T systems to store the captured knowledge. As Figure 9 demonstrates, 54% of respondents stated that they systematically use data warehouse and data mining tools to foster knowledge storing and sharing, 49% use Dubai Government Intranet for knowledge sharing and communication, and 47% systematically use other online collaboration tools. However, 38% do not use lessons' learned databases where the tacit form of knowledge resides and could be stored.

In fact, the perception towards KM in most organizations is that KM is synonymous with Knowledge Management Systems (KMS). Most employees have limited and narrow conception of KM. They often think that the implementation of state of art technological instruments to store knowledge is all what KM is about, overlooking the other structural, cultural and managerial elements without which KM program is likely to fail to bring the desired outcomes.

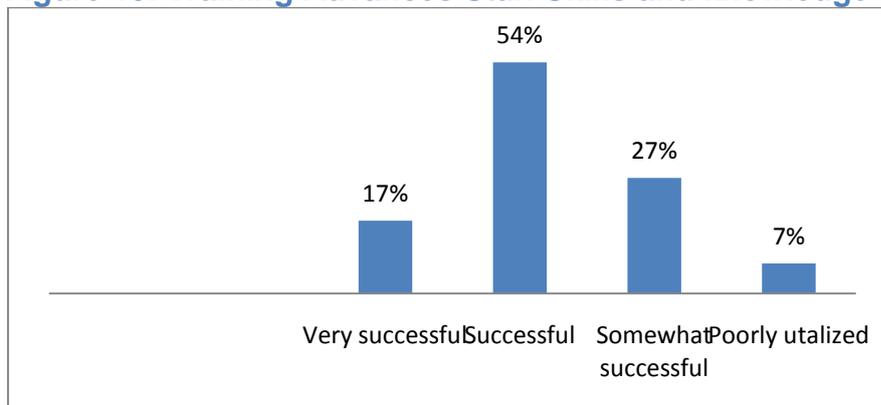
Human resources

Thomas et al (2001) argue that too much attention has been paid to the technical aspects of KM and less research has been conducted on the importance of human and social aspects of KM. Hislop (2003) goes further to argue that the success of KM initiatives is fundamentally reliable on having people who are able and know how to share knowledge. Moreover, as Storey and Quintas suggest, the success of KM initiatives needs employees who are "willing to share their knowledge and expertise"(p. 359). The creation of an environment and mechanisms that allow employees to both maximize the use of their talents and to easily share knowledge are among the main drivers of successful KM programs.

The survey administered to participant organizations focused on measuring (1) the effectiveness of human resource development (HRD) activities in building skills and (2) the extent to which these resources are effectively utilized in the workplace. On the question about HRD effectiveness, the results (Figure 10) indicate that 54% of respondents consider the training and skill building provided by the organizations to

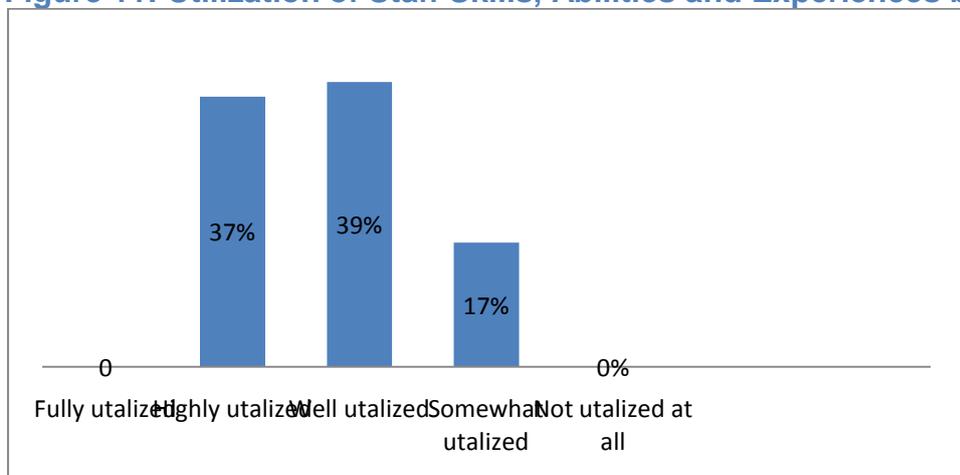
be successful and 17% very successful in enhancing the staff skills, abilities and knowledge.

Figure 10: Training Advances Staff Skills and knowledge



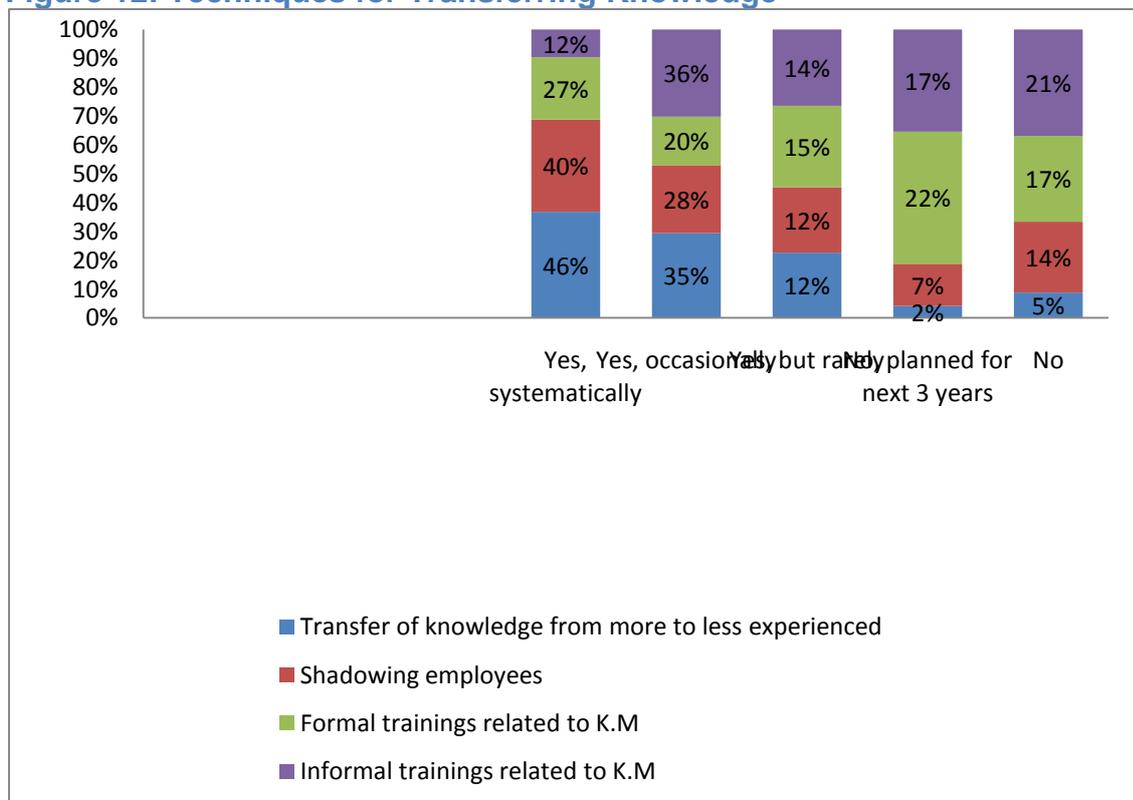
However, the results show different patterns in terms of the actual utilization of competence. It was found that the skills, abilities and experiences of employees are not fully recognized or utilized by most public organizations in Dubai. Figure 11 demonstrates that 0% of respondents indicated that their skills were fully utilized, 37% indicated that their skills were highly utilized, 39% utilized, and 17% indicated poor utilization. To some extent, these figures show that although employees' skills and abilities are available, they are not always well recognized by their organizations. This is consistent with the findings of other cross-national studies conducted in the region. For example, Gabriella et al (2008) found that underutilization of the labor capacity of nationals stands as one of the main human capital challenges in the UAE, Qatar and Oman. Another study conducted by Al-Yahya (2009) in Saudi Arabia, Oman, and the UAE. It found that underutilization of human capital resources (knowledge, skills, and abilities) in the public sector averaged 47% in Saudi Arabia, 44% in Oman, and 40% in the UAE. These findings conclude that although skills and competencies are increasingly abundant, they are invariably under-utilized and un-activated and thus their potential contributions to performance are largely unrealized.

Figure 11: Utilization of Staff Skills, Abilities and Experiences by Organizations



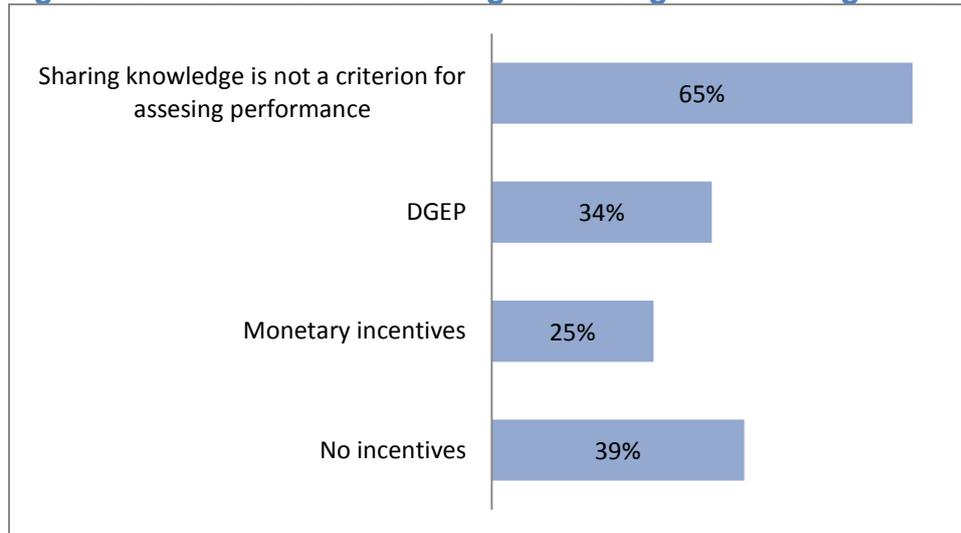
To transfer and share knowledge, government entities in Dubai, with varying degrees, experiment with several techniques such as shadowing, and to a lesser extent, formal and informal meetings to secure the transfer and sharing of knowledge among their employees. For example, Figure 12 shows that 46% of respondents seek to systematically transfer knowledge from more to less experienced staff, 40% use shadowing employees as a form of capturing their tacit knowledge and benefiting from it. However, only 27% and 12% respectively indicated that they systematically organize formal and informal trainings related to KM. In fact, the lack of awareness of KM and its importance, which is one of the main challenges that government entities face, can be explained by this lack of sufficient formal and informal trainings.

Figure 12: Techniques for Transferring Knowledge



As for providing the adequate incentives to encourage employees to share knowledge, survey data (Figure 13) shows that 39% of respondents confirm the lack of incentives in place for sharing knowledge. More importantly, 65% of indicated that sharing knowledge is not a criterion for assessing individual performance of employees. Dubai Government Excellence Program (DGEP) seems to have a positive influence on employees' sharing of knowledge as 34% consider it a motivating factor. With regards to monetary incentives, only 25% indicated their use as motivation to share knowledge.

Figure 13: Incentives for Sharing Knowledge Within Organizations



Accordingly, it is difficult to aspire for an effective KM program in the absence of proper incentives. Employees are less incentive to share what they know if their efforts are not appreciated and rewarded, especially with this is accompanied by fear of losing one's job when he or she let go of their valuable asset and source of employment.

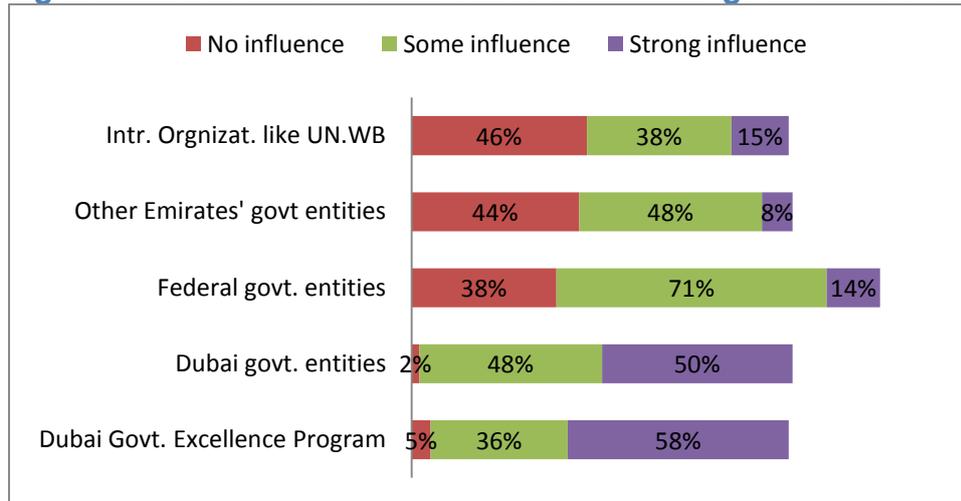
1) Environmental influences

Managerial and resource influences are internal factors that affect the KM success. Environmental influences are, however, typically external and not necessarily under the direct control of organization management. In the public sector, political influence and macro-institutional arrangements can limit the scope of knowledge sharing and put a ceiling on what can be shared both inside and outside of the organization. This is more prevalent in the Middle East and North Africa (MENA) region where governments are either very sensitive about sharing information and knowledge or unable to do it because of poor and fragmented inter-governmental relation systems. Also, the social and cultural environment in which an organization operates is an external factor that can influence knowledge sharing culture, as illustrated below.

Governmental influence

KM in Dubai's public sector is subject to pressure from various governmental bodies and programs. Interestingly, as demonstrated in Figure (14), 58% of respondents indicated that DGEP was the main driver and source of strong influence on government entities to consider KM programs. The same results are drawn from the interviews with the organizations that started to experiment with KM.

Figure 14: Governmental Influences on KM Programs in Dubai

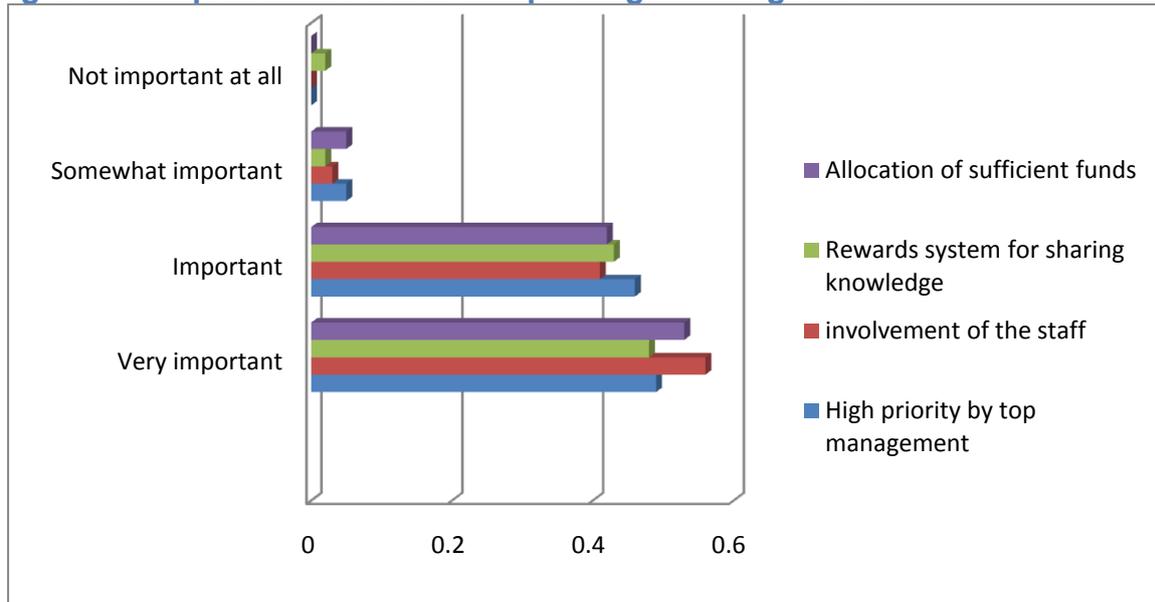


Seeking to strengthen cooperation and coordination with other local and federal authorities also serves as a driver to adopt KM systems. International organizations do not seem to be significantly influential as only 15% of respondents said their role was strongly influential and 38% said that they have some influence.

Other Important factors

Surveyed organizations were asked to indicate the importance of some practices in improving the performance of their KM programs. This shows a clear image of what government entities in Dubai should focus on in order to have a successful KM program that meets their expectations. As Figure 15 demonstrates, respondents agree that allocation of sufficient funds, reward systems, involvement of staff, and management support and commitment were important requisites for KM systems to succeed. In particular, direct involvement of staff in implementing and running the KM projects scored the highest at 56%. Allocating sufficient funds (53%) and high priority given by top management came second and third as important factors. These findings are consistent with the interviews conducted with major government entities in Dubai that considered allocating sufficient funds, involvement of staff and top management in adopting KM programs.

Figure 15: Important Factors for Improving KM Programs



Barriers and Challenges for Knowledge Management

People, who constitute the main foundation of Knowledge Management, can be also considered the major obstacles to its implementation (Riedge 2005, Hayduk 1998). A significant corpus of academic papers and consultancy firms' reports has addressed the challenges inhibiting knowledge sharing in both public and private organizations. Two key elements have been commonly identified, especially in the context of the Arab world: 1) organizational culture and 2) trust among individuals and institutions. Each of these factors has significant influence on the adoption and sustainability of KM. This section of this paper addresses these two main challenges that inhibit the progress of KM initiatives and constitute strong barriers in front of any attempt to promote them in both the public and private sectors.

1) Organizational culture

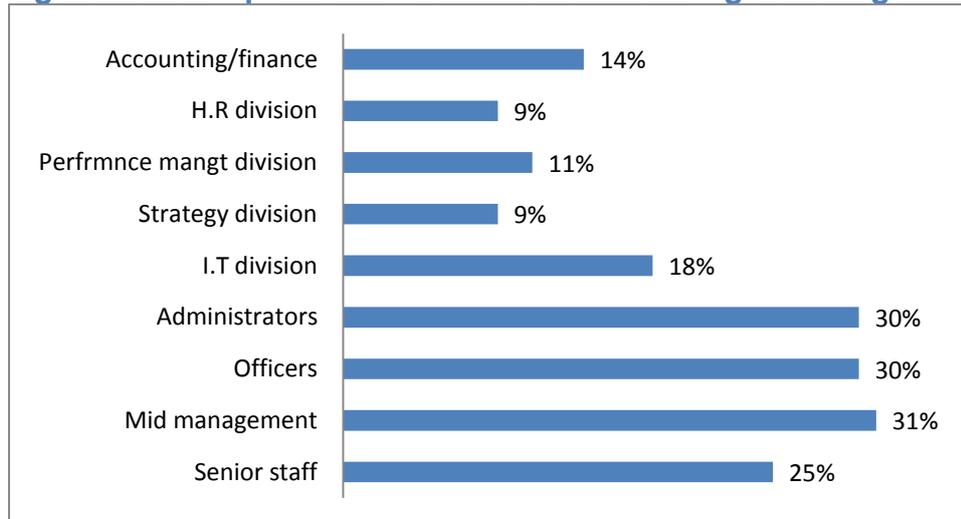
Numerous studies have found that knowledge and organizational culture are inextricably linked (Robertson and O'Malley 2000, McDermott and O'Dell 2001, Swan et al 1999). Culture shapes the understanding of knowledge and its dissemination within the organizations and groups of individuals. A cultural context that does not emphasize the value of knowledge or hinders its utilization through greater participation in decision making and vertical interaction among social and organizational groups will certainly have difficulties in implementing KM programs and reaping its benefits. In many ways, culture sets the stage for social and collective orientations that make accumulating and sharing of knowledge a way of life in and outside the workplace. Cultural values and norms can also shape the attitudes toward accepting or resisting change at work. Numerous studies have looked closely at how the cultural setting of an organization can play a role in determining the fate of its KM programs. For example, Robertson and O' Malley (2000) found that when workers' expectations are satisfied through fair HR practices and the organizational culture promotes knowledge sharing, employees feel more

eager to share knowledge and benefit others from what they know. Similarly, McDermott and O'Dell (2001) found that employees are tempted to share knowledge when the organizational culture rewards knowledge sharing. This could take the form of financial or moral support and acknowledgement to those who make extra efforts to disseminate what they have learned to others within the organization. One of the most important factors that are found in the existing research to influence knowledge sharing is the employees' level of organizational commitment (Gallie et al 1998, Smithson and Lewis 2000). Storey and Quintas (2001) argue that securing the trust, commitment and motivation of employees to share knowledge is one of the main issues that are to be taken into consideration while implementing KM projects. This is due to the fact that they are less likely to quit their organizations, and they are usually more motivated to make the extra efforts to transfer knowledge to others.

The dominant organizational culture in the Arab world poses numerous challenges regarding the sharing and transfer of knowledge (Ahmad and Daghfous 2009, Skok and Tahir 2010) and results in severe resistance. Although throughout the annals of history, Arabs and Muslims commanded knowledge sharing and Qur'an requires all Muslims to learn and spread knowledge among them, current research findings prove that Arabs are among the most resisting people to knowledge sharing due to various reasons. Weir and Hutchings (2005) point out that the Arab traditional culture that was built on trade requires "socialization" and establishment of trust as the first requirement before getting involved in any business activity. This is a time consuming process, but once it is established, all the formalities and barriers become demolished. Arab people tend to engage in relationship building activities before they can feel secure in dealing with the others, and; therefore, feel confident to share what they know.(Weir and Hutchings 2005). Skok and Tahir (2010) further confirm the complexity and difficulty of sharing knowledge in the Arab world, and how people with their social and cultural beliefs are the biggest hindrance towards knowledge sharing.

Hutchings and Michailova (2003) state that individual resistance to knowledge sharing is not something uncommon; it is phenomena that is widely viewed in organizations especially in transitional economies. Government entities in Dubai struggle to provide the appropriate stage for knowledge sharing and spreading awareness about its importance for the individuals and the organizations as a whole.

Figure 16: Groups that Resist KM and Knowledge Sharing



Our interviews found that there was considerable resistance from some groups towards the idea of KM on the one hand, and to share what they know with others on the other. Figure 16 shows that middle management, administrators and officers ranked highest as the main source of resistance within government organizations by respectively scoring 31% and 30%. Moreover, 50% of respondents indicated that comfort with the status quo and fear of the unknown were major concerns that discourage taking new practices that they are not sure about what their outcomes could be. DEWA, KHDA and Dubai Courts stated that they witnessed levels of resistance among their employees who were habitually attached to and defensive of their old ways of doing things. Changing their behavior and attitudes is a hindrance to successful KM. Lastly, different cultural and linguistic backgrounds of individuals within one organization, which characterize the workforce in the GCC countries, was cited by 38% of respondents as a challenge to knowledge sharing.

2) Trust

One characteristic of organizational culture that has been discussed with more focus in this paper is the issue of trust. Lack of trust among individuals and between employees and management constitutes probably the main challenge to knowledge sharing especially in the Arab world. Trust is a fundamental ingredient in knowledge creation, acquisition and dissemination (Riege 2005). It is unlikely for individuals to share what they know when they fear that others might misuse their knowledge or unethically attribute it to themselves. When employees lack interpersonal trust, they refrain from sharing what they know with each other; drastically blocking the processes of KM (Sun and Scott (2005). This attitude is pertinent to the Arab world where establishing trust and connections is the first step before engaging in any collaborative and sustainable exchange. People often are reluctant to share their tacit knowledge with anyone unless firm trust and expected trustworthiness are well-established. Ahmad and Dagfhous (2010) indicate the importance of building trust by creating legal frameworks to both protect the individuals who share knowledge and also incentivize them to do so.

The interviews conducted with Dubai government entities show clearly how absence of trust in organizations leads to inadequate knowledge exchange. Employees often refrain from sharing what they know with each other out of fear that sharing their

knowledge will be against their interest in the future. They may lack the confidence in and loyalty to their organization due to the lack of job security as well as residency rights in the part of expatriate populations. Moreover, most often, employees do not receive training about the value of sharing knowledge for the institution and individuals nor assured that sharing knowledge would not constitute a threat to the security of their jobs but an asset.

Conclusion and Recommendations

This paper discussed the importance of KM in Dubai's public sector and identifies a range of drivers and obstacles to KM in Dubai's public sector in particular. It applied a framework developed by Holsapple and Joshi (2000) to assess to what extent the current orientations and practices of Dubai's public organizations amount to effective and mature institutionalization of KM. This research identifies several shortfalls within the content of managing and sharing knowledge. It also provides a set of conclusions and recommendations that can be useful to public sector organizations in their efforts to build and operate knowledge-based organizations capable of delivering better results. The following is a summary of the main conclusions and recommendations:

- 1) One of the main challenges that government entities face with their KM programs in Dubai is the vagueness and unclarity of the concept to most of their employees. This is a phenomenon that is found in other countries as well and only time and focused strategies cure it. Moreover, KM is recently introduced to the Middle East and needs more time to mature and become clear to everyone. These organizations, however, need to invest more in organizing workshops, training sessions and involving their employees more in understanding what KM stands for and its crucial role for the development and sustainment of the organization. Also, one term should be used for KM instead of using many words interchangeably to avoid confusion and uncertainty about the meaning of the concept. More importantly, KM is about enhancing interaction and communication among people and within organizational units and levels. This calls for avoiding the tendency to reduce KM definition to technical terms by adopting new IT solution and automation. KM is a dynamic and social system and its success hinges largely on the quality and thickness of human interactions of people within and outside the workplace.
- 2) Among the five major government entities in Dubai, only two (Dubai Police and Dubai Courts) seem to have recognized the crucial role of tacit knowledge and have implemented the necessary tools to capture, document and share it. Other three organizations still lag behind and need to take the necessary steps to implement a process that insures that tacit knowledge is properly maintained and easily accessed. KM programs are mainly designed to protect tacit knowledge from loss and ascertain that it resides in the organization even after the departure of employees. Therefore, organizations in Dubai should strongly consider its importance and create the tools to share it. This is an essential requirement to have a successful KM program with the expected outcomes achieved.

- 3) The vast majority of public organizations in Dubai are not adequately aware of the vital role leadership plays in creating the right conditions to create, select, organize, conserve, disseminate and transfer knowledge to achieve an organization's strategic objectives. The lack of effective leadership affects negatively the adoption and success of KM as a pathway to sustainable progress. Therefore, before establishing a KM department, program or even an initiative, government entities should select competent leaders who genuinely believe in and promote values and practices associated with knowledge management whether as heads of organizations, as managers of central units for KM, as knowledge champions, or knowledge officers. This will guarantee that the programs follow a systematic, coherent and well established structure.

- 4) Dubai government entities pursued advanced technological instruments to store the created or captured explicit knowledge; however, lessons' learned from this study establish that these instruments don't always unpack tacit knowledge embedded within individuals. Tackling this challenge involves the removal of certain barriers to the sharing of tacit knowledge including the false belief in hierarchical nature of knowledge (those with bigger organizational titles are wiser and knowledgeable), intolerance to risk taking and new ideas even if they are not supported by hard facts but intuition, inequality in status and the extent to which it is visible among work members, and organizational silos that set apart individuals and teams and away from collaborative problem identification and problem solving. Moreover, it is imperative to establish mechanisms that ensure the "the know-how" of employees is safely stored and remains in the organization by focusing more on developing and utilizing the human aspect of KM processes.

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