

**7th Global Forum on Reinventing Government:
Building Trust in Government**

Workshop on Managing Knowledge to Build Trust in Government

OVERVIEW OF KNOWLEDGE MANAGEMENT IN THE PUBLIC SECTOR

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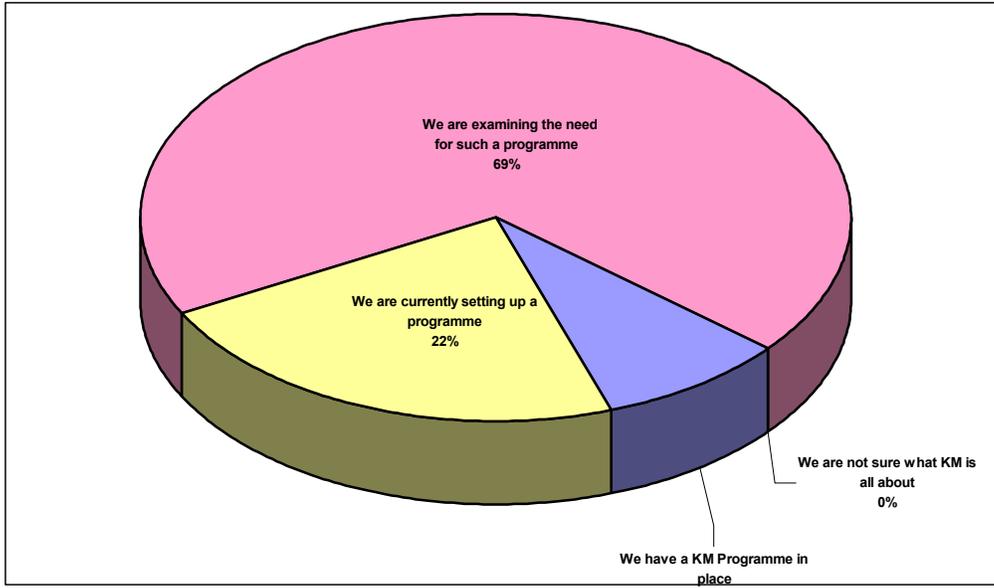
Introduction

With the explosion of digital connectivity, government agencies all over the world are using ICT applications to increase productivity, improve accountability, enhance transparency and facilitate public sector reform. Improved knowledge management (KM) is essential to governmental agencies at the national, regional or local levels, because governmental organizations are basically knowledge-based organizations. KM has also become one of the initiatives within most countries' e-Government Plans. This paper presents an overview of KM initiatives and trends in the public sector from primarily developing countries. The paper also includes recommendations for successful KM implementations, by drawing from lessons learned and best practices in published reports of successful public sector KM initiatives.

Information from KM initiatives and trends are drawn from a recent survey (NUS 2007) conducted by National University of Singapore, with respondents from the following member nations: Barbados, Brunei, Bulgaria, Cambodia, Cyprus, Egypt, Fiji, Ghana, India, Iran, Jamaica, Jordan, Maldives, Mozambique, Nigeria, Pakistan, Philippines, Romania, Seychelles, Solomon Islands, South Africa, Sri Lanka, St Lucia, Tanzania, Thailand, Trinidad and Tobago, Turkey, Tuvalu, Uganda, Vietnam, Yemen and Zimbabwe.

State of KM deployment

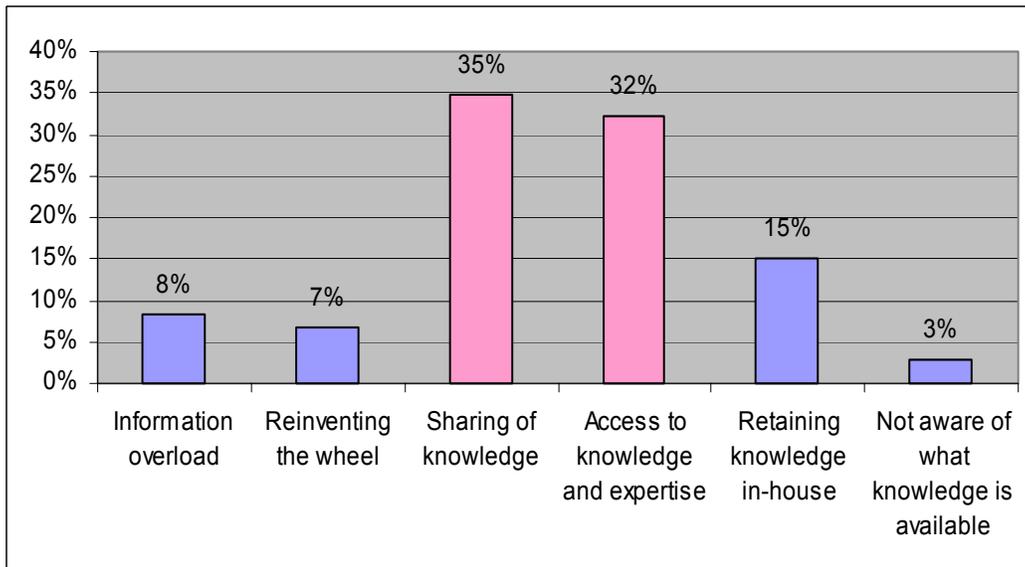
Based on the results of the NUS survey, all the respondents are aware of KM and have KM programs in place, are setting the program, or examining the need for such programs.



Similarly, in a OECD survey conducted in 2003 (OECD 2003), almost half of the organizations surveyed consider KM as one of their top five internal priorities and another half consider it to be one in the next two years or longer.

Goals of KM

67% of the participants of the NUS survey indicated that the goal stated for KM programs is to either share knowledge or to provide access to knowledge and expertise.



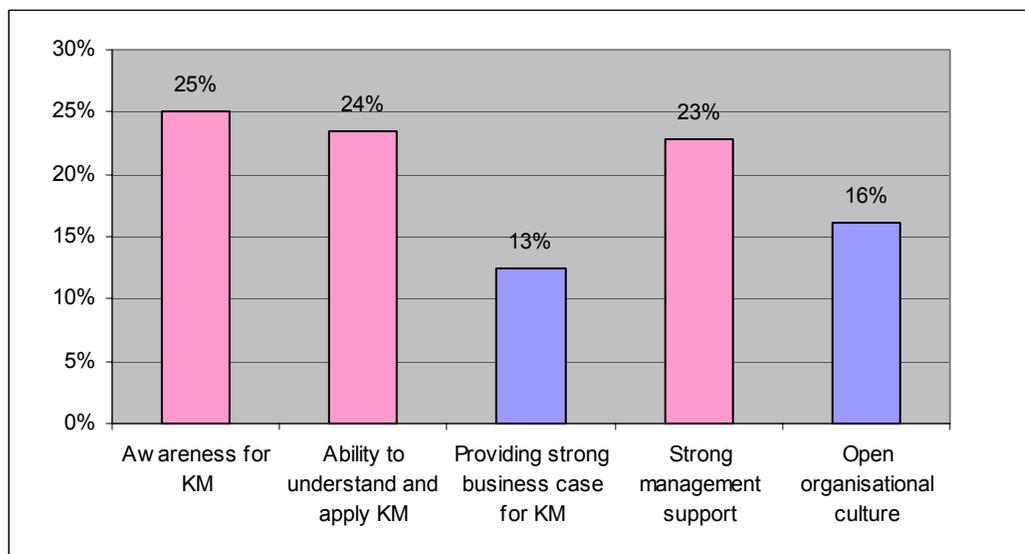
In the OECD survey, concerns for efficiency and productivity stand out as the main motivators for establishing KM practices. 90% of respondents consider that improving efficiency and productivity and 75% responded that minimizing duplication of efforts

between divisions and directorates are very important or important factor motivating the establishment of KM practices.

Improving transparency and outward sharing of information as well as improving working relations and trust within organizations also rank high among factors motivating the establishment of KM practices for more than 75% of respondents while approximately 50% of respondents considering them as very important factors.

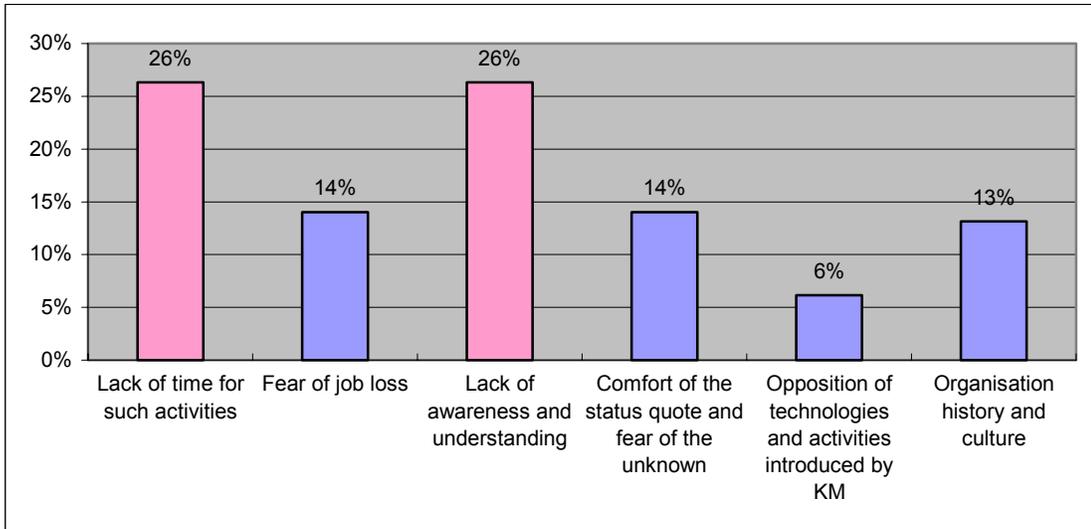
Challenges of KM initiatives

The NUS survey shows that the top three challenges are providing awareness for KM (25%), ability to understand and apply KM (24%) and providing strong management support (23%).



Reasons for resisting KM

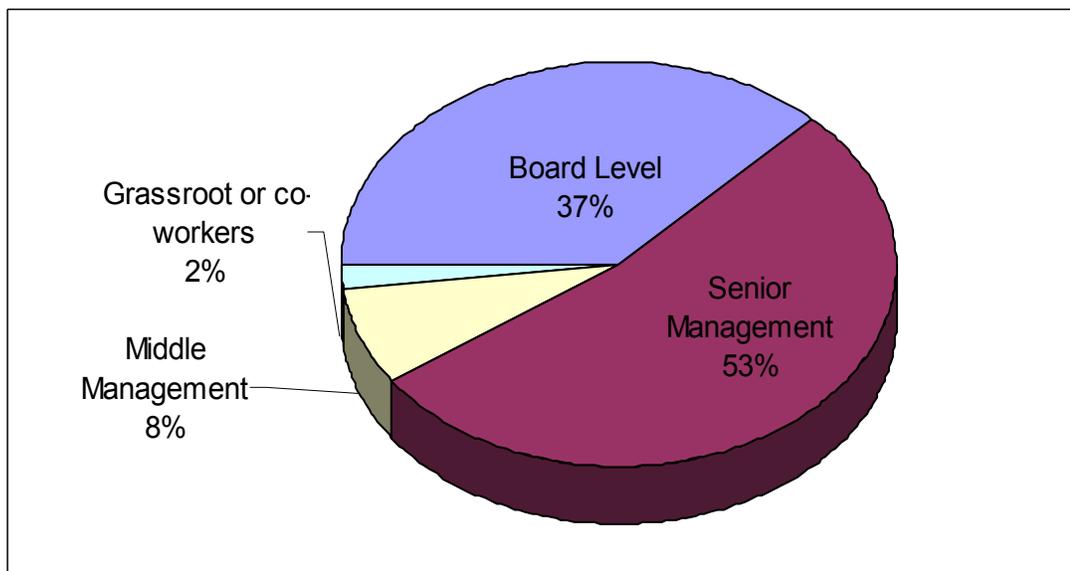
In the NUS survey, lack of time and lack of awareness and understanding are the top 2 reasons for resisting KM initiatives.



Similarly, in the OECD survey, more than 85% of respondents point to lack of time or resources and 78% to the difficulty in capturing employee’s undocumented knowledge. 18% of organizations indicated that the fact that KM is not a priority within the modernization program of their government is one of the factors impeding implementation of KM practices.

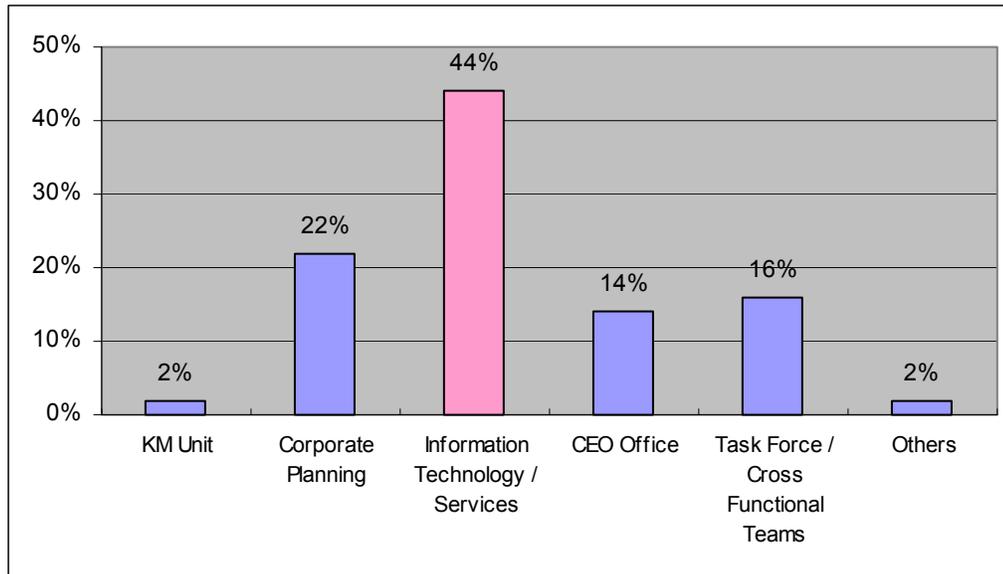
Organizational support for KM

In both the NUS and OECD surveys, the respondents indicated top management support for their KM programs.



Unit tasked to drive KM initiatives

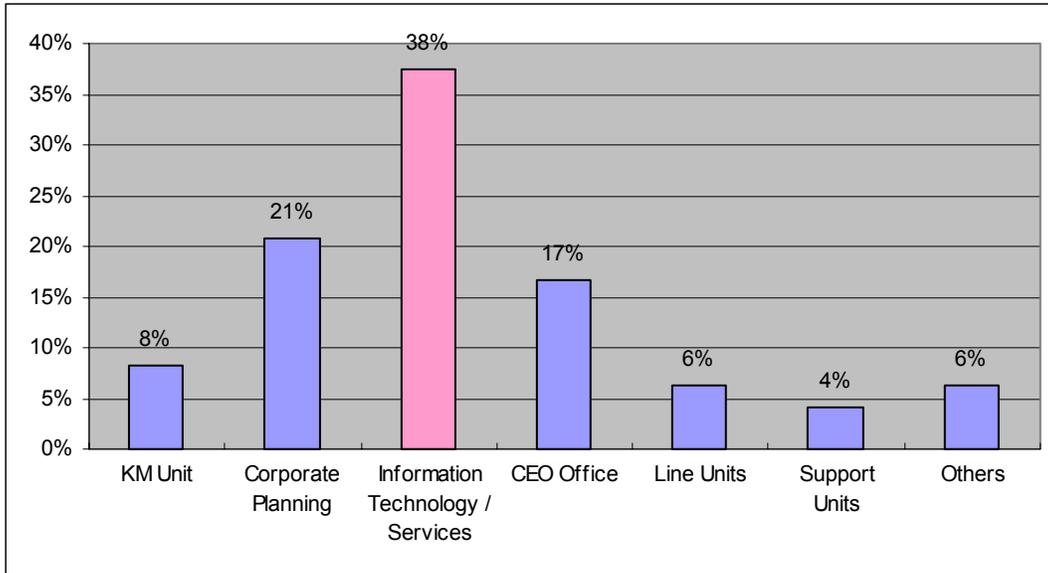
In the NUS survey, 43% of the respondents indicated that the Information Technology / Services group is the unit tasked to drive KM initiatives, followed by the Corporate Planning Group (22%), Cross Functional Teams (16%) and the CEO's Office (14%).



In the OECD survey, half of the organizations have also established central co-ordination units for knowledge / information management, quality groups / communities of practice, knowledge networks and Chief Knowledge Officers, and more than 20% planned to establish them in the next 3 years.

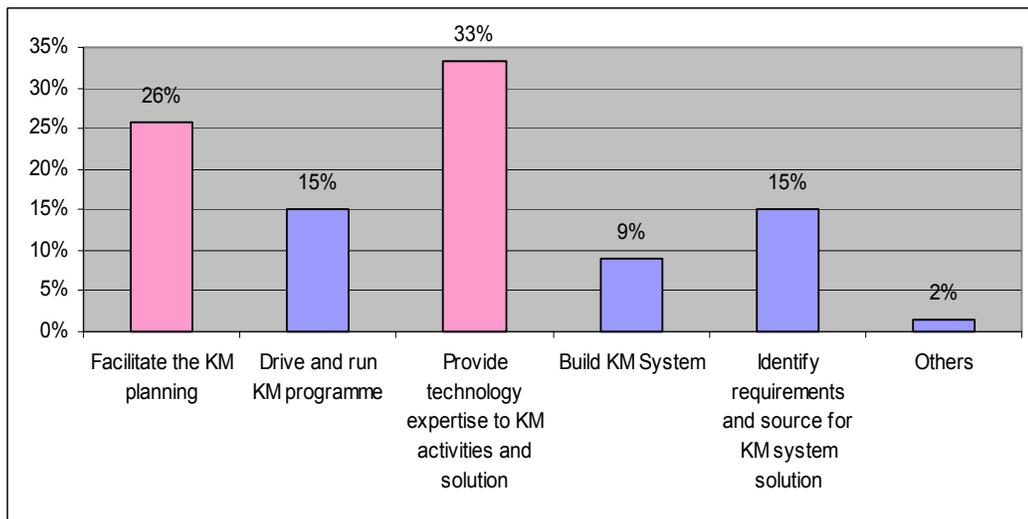
Funding of KM initiatives

In the NUS survey, again the Information Technology / Services group ranked highest as the unit funding the KM initiatives (38%). Other groups that provided the funding included the Corporate Planning (21%) and CEO office (17%).



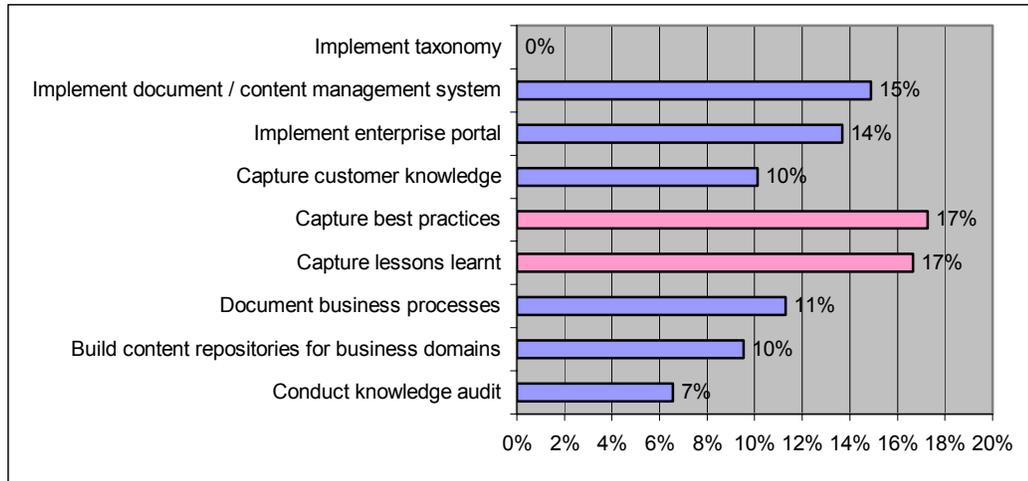
Role of IT in KM

Based on the NUS survey, the key role of the IT / Services group is to facilitate planning of KM initiatives (33%) and to provide technology expertise for KM activities and solutions (26%).



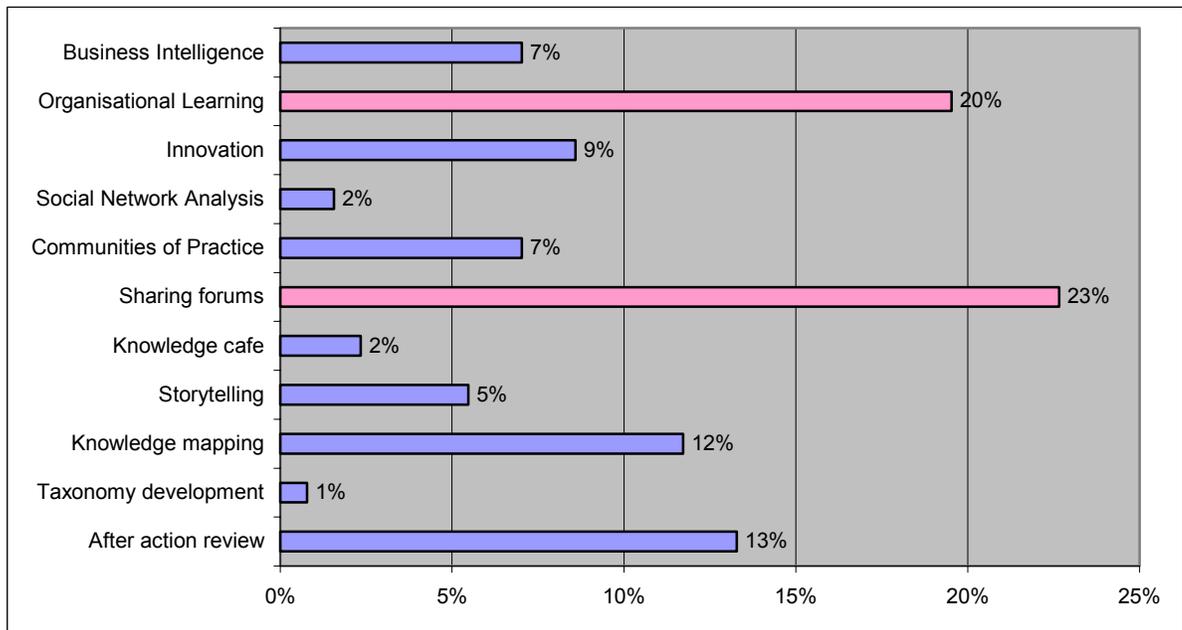
Types of KM activities

The top four KM activities according to the NUS are the capture of lessons learnt (17%), capture best practices (17%), implement document / content management systems (15%) and implement enterprise portal (14%).



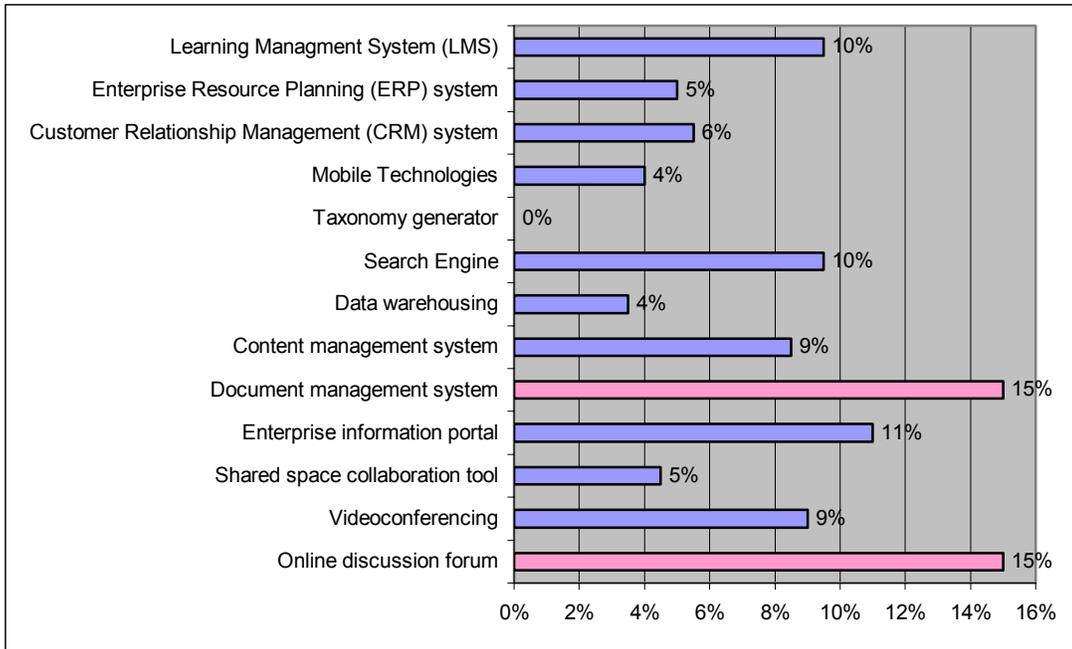
Types of KM techniques

In the NUS survey, the top two techniques used in KM initiatives are sharing forums (22%) and organization learning programs (19%).



Types of KM technologies

Online discussion forums (15%) and document management systems (15%) are the top 2 technologies being deployed according to the NUS survey.



From the survey data, we see certain clear trends emerging:

- KM is a key initiative recognized as central to information sharing and access between public sector agencies and between public sector and the citizens they serve
- Ownership of KM initiative and its implementation remains largely in the government IT department
- Barriers to successful KM adoption are largely from lack of awareness and lack of time. The lack of time can be interpreted as lack of awareness of KM's importance.

These trends point to an opportunity for governments from developing nations to use KM as a key driver towards increasing public sector productivity and building trust in government by focusing on a few key policies and designating the accountable department to driving these policies into effective implementations.

ANALYSIS OF KM CHALLENGES AND ITS IMPLICATIONS TO POLICY OPTIONS

The main benefit of KM is to maximize productivity in the public sector, while enhancing public service delivery. More specifically, the objectives for KM initiatives include (Riege and Lindsay, 2006)

1. Maximize efficiencies across all public services by connecting silos of information across different levels of government and across borders
2. Develop new or consolidate outdated systems to improve overall performance and capitalize on a broader, more integrated and easier accessible knowledge base
3. Improve accountability and mitigating risk by making informed decisions and resolve issues faster, supported by access to integrated, transparent information across all organizational boundaries
4. Deliver better and more cost effective constituent services such as enhancing partnerships with and responsiveness to the public

All these objectives lead to access to knowledge and expertise; and sharing of knowledge which are consistent with the survey findings. As a consequence, most KM activities surround the capture of best practices and lessons learnt. These activities apply to both practices within the government agencies as well as engagement with the citizens. Government agencies are encouraged to publish and explain all their non-sensitive public policies online. As the public service seeks to be more open, transparent and responsive, it has to improve its ability to engage the public effectively. Public consultation is the process of seeking the views, ideas, concerns and feedback of citizens/stakeholders in developing and implementing public policies and programs. Most countries have launched a central government portal with feedback forums as a means to engage their citizens and employees as one of the first KM activities.

As KM is one of the initiatives within e-Government program, the challenges for a successful implementation of e-Government plan would be similar to that for KM programs. These common challenges include (Ndou, 2004)

1. Role of Leaders and strategy definition
2. Change management
3. Development of human capital and life long learning
4. Provision of ICT infrastructure
5. Partnership and collaboration
6. Policies and legislation

Role of leaders and strategy definition

Based on the survey results, the developing countries are aware of the potential of KM and are very keen to implement KM initiatives in their countries. The results also show that there is senior management support for KM initiatives and in most cases, the IT / services group is driving and funding the KM initiatives. The key challenges include setting up programs to promote awareness and prioritizing the various initiatives within

the government. While there are many examples of formal e-Government plans and assistance from various developmental agencies and private sector to set up such plans, there is little documentation of government-wide KM initiatives in the developing countries. One example can be found in Singapore where KM is one program within the island nation's Infocomm Plans (Singapore Government Infocomm Plans). The program starts with the provision of education programs for civil servants to build awareness of KM and implementation requirements. At the same time, an assistance scheme to nurture good KM ideas, the Knowledge Management Experimentation Program was also initiated. The next phase of the program was to develop a KM framework to drive pervasive adoption of KM practices. Clinic sessions were conducted to disseminate the framework and its implementation. More recently, the KN@Public_Sector program was started and the program aims to enhance inter-agency collaboration, to share useful knowledge repositories through the development of inter-agency applications. The potential is to put in place a knowledge sharing process for formulating KM implementation plans for developing countries.

Change management

The stated reason for not embracing KM initiatives is the lack of time or resources. Employee resistance to change is still the biggest barrier to successful change. Change management issues must be addressed as new work practices, new ways of processing and performing tasks are introduced. Change management programs similar to the ones for encouraging adoption of changes from e-Government projects should be introduced. These could include introduction of incentives for employees to learn and change; and establishment of well structured plans that embrace employee participation throughout all stages of a change process. Similar programs also need to be put in place to encourage citizen interactions and engagements with the government.

Development of human capital and life long learning

The efficiency of KM is a function of efficient institutional capacity and trained human resources that can disseminate knowledge quickly. Governments need to continually learn in order to remain relevant to the constituents they serve (Nair, 2005). Different KM learning programs have to be put in place. Top managers and sponsors would require basic understanding how KM can improve the government processes, its integration with the broader goals of e-Government implementation; and implementation requirements including technical and legislative changes. Programs for educating the civil servants on how to use KM effectively and incorporate its usage into existing government functions are also required.

Provision of ICT infrastructure

As part of the e-Government initiatives, a number of countries have launched their central government portal as a first step to provide easy access and transparent information. News articles published by Public Sector Technology & Management gave the following examples. China has launched their central government portal with the objective to

promote transparency and prevent miscommunication between the people and the government. The website has four sections providing information about government affairs, online services for citizens, enterprises, residents from overseas and interactive communication between government and citizens. The government of Vietnam has also officially launched its e-government web portal. The site will help build greater trust from local residents in the government by promoting policy transparency and openness, as well as in clarifying the accountability of government agencies. It also provides information on government administration and publishes economic and social reports. The site will help the government agencies to share information and promote the country to foreign investors and visitors from abroad. Kuwait has established a portal to promote transparency and involve citizens in the governance process. The new portal will promote greater awareness of the decisions of the Council of Ministers and enable greater scrutiny by citizens. By publishing subsequent follow-up actions, the portal will also give a boost to accountability.

Besides the central government portal, other technologies deployed include document management systems. Many governments consider document management systems as an essential application to overcome the problems of information accessibility. Another KM solution is the online discussion forum. An example of effective use of online discussion forum as a KM solution is Bangladesh. By using AgriNet Bangladesh, citizens of Bangladesh can exchange their ideas about agriculture; refer to experts' knowledge and the latest news (Wagner, 2004).

One major challenge for the developing countries is the ability and readiness to spend in implementing the required IT infrastructure for KM projects. One potential solution is to find inexpensive solutions for knowledge and information delivery.

Partnership and collaboration

Collaboration and cooperation at local, regional and national levels, as well as between public and private organizations are important to build trust in government. Developing a citizen centre focus for projects can help to identify opportunities for closer technical, service delivery and policy integration. Cross agency teams within the government can help to implement and manage these projects. Public-private partnerships are often used for complex projects in which knowledge from both public and private sectors need to be combined. In Malaysia, the National IT Agenda and the Governance Agenda incorporate the smart partnership model/concept in Malaysia's drive toward achieving a Values-Based Knowledge Society. The goal is to forge a smart partnership between public, private and community sectors (Nair, 2005). Various collaboration models have to be defined to ensure the success of KM programs.

Policies and legislation

Governments have a mandate to maintain their citizens' trust. One key challenge is to respect accepted privacy principles while allowing the benefits of internet and information flow to citizens. A framework to provide for enforceable electronic

transactions is also required. For example, Philippines had issued new rules and policies to govern and regulate electronic commerce and interactions including e-Commerce law to provide legal protection to electronic documents (Ndou, 2004). Reviews of existing legislations are also required to ensure successful implementation of seamless service delivery. In Singapore, a Smart Regulation Committee was set up to bring about a facilitative public sector that works as one by changing the mindset of agencies from that of a regulator and controller, to that of a facilitator. It is also about "boundary less behavior" across public agencies - "Many Agencies - One Government - No Boundaries" (PS21). There are also requirements for international policies for protection of privacy and recognition of digital signatures.

CONCLUSION

This paper presented an overview of KM initiatives and trends in the public sector from primarily developing countries. From the survey data, KM is seen as a key initiative recognized as central to information sharing and access between public sector agencies and between public sector and the citizens they serve. The ownership of KM initiative and its implementation remains largely in the government IT department. Barriers to successful KM adoption are largely from lack of awareness and lack of time. The lack of time can be interpreted as lack of awareness of KM's importance. These trends point to an opportunity for governments from developing nations to use KM as a key driver towards increasing public sector productivity and building trust in government by focusing on a few key policies and designating the accountable department to driving these policies into effective implementations.

From the analysis of the common issues in KM implementation and the best practices of some successful public sector KM initiatives, we offer the following recommendations:

- A knowledge sharing process for formulating KM implementation plans for developing countries
- Change management programs similar to the ones for encouraging adoption of changes from e-Government projects should be introduced
- KM learning programs
- IT infrastructure and inexpensive solutions for knowledge and information delivery
- Collaboration models between local, regional and national levels, as well as between public and private organizations.
- Legislations and policies for protection of privacy and recognition of digital signatures

Deeper studies on KM initiatives and how policies can impact KM implementations should be carried out. These studies should also look into the achievements of KM and whether productivity and public service delivery have been enhanced.

DEFINITIONS OF KNOWLEDGE MANAGEMENT TECHNOLOGIES

Online Discussion Forum

A facility on the internet for holding discussions and posting user generated contents.

Video Conferencing

A set of interactive telecommunication technologies which allow two or more locations to interact via two way video and audio transmissions simultaneously

Shared Space Collaboration Tool

Software that enables people to connect or collaborate

Enterprise Information Portal

A single gateway for users, such as employees, customers and company's partners to log into and retrieve corporate information, company history and other services or resources.

Document Management System

A computer system to track and store electronic documents and / or images of paper documents

Content Management System

A system to support the creation, update, publication, translation, archival and retirement of digital information

Data Warehousing

A main repository of the organization's historical data

Search Engine

A system to help find information stored on a computer system

Taxonomy Generator

A set of tool to classify information / knowledge

Mobile Technologies

A cluster of techniques whereby a device can conduct communications without the need for a physical cable to connect it to any other device or network

Customer Relationship Management System

A system for collecting, storing, analyzing and managing relationships with customer

Enterprise Resource Planning System

A system that integrates all the data and processes of an organization

Learning Management System

A system that enables the management and delivery of online content to learners

Source – Adapted from Wikipedia

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Ndou, Valentina (Dardha), 2004, "E-Government for Developing Countries: Opportunities and Challenges", The Electronic Journal on Information Systems in Developing Countries, Vol 18, pp 1-24

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OECD, 2003, "Knowledge Management Practices in Ministries/Departments/ Agencies of Central Governments". This was a survey of 20 member countries conducted by the Organization for Economic Cooperation and Development in 2003. The survey attracted 168 respondents from countries including Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Korea, Mexico, New Zealand, Norway, Poland, Portugal, Slovak Republic, Sweden, UK and US.

PS21. In May 1995, the Singapore Public Service embarked on a movement called Public Service for the 21st Century (PS21) to prepare the Singapore Public Service for the future by Anticipating, Welcoming and Executing Change. PS21 has two basic objectives. The first is to nurture an attitude of service excellence in meeting the needs of the public with high standards of quality, courtesy and responsiveness. The second to foster an environment which induces and welcomes continuous changes for greater efficiency and effectiveness, by employing modern management tools and techniques, while paying attention to the morale and welfare of public officers. www.ps21.gov.sg/

Public Sector Technology & Management Magazine, 19 Jan 2006, 16 Jan 2006, 22 Nov 2005, <http://www.pstm.net/>

Riege, Andreas and Lindsay, Nicholas, 2006, "Knowledge Management in the public sector: stakeholder partnerships in the public policy development", Journal of Knowledge Management, Vol 10, No 3, pp 24-39

Singapore Government Infocomm Plans. The Government's infocomm journey started in the early 80's with the aim of transforming the Singapore Government into a world-class user of information technology. The Civil Service Computerisation Programme automated work functions and reduced paperwork for greater internal operational efficiencies. The late 90's saw the convergence of information technology and telecommunications which transformed the concept of service delivery. This paved the way for the launch of the e-Government Action Plan (2000 - 2003) and the e-Government Action Plan II (2003 - 2006). The key objective of the first plan was to roll out as many public services online as possible, while the emphasis of the second plan was to improve the service experience of customers. Today, Singapore is regarded as a leading e-Government in international benchmarking studies. iGov2010 is the Singapore Government's five-year masterplan that leverages infocomm to continue to delight our customers and citizens. To achieve this vision, four thrusts have been identified: Increasing Reach and Richness of e-Services; Increasing Citizens Mindshare in e-Engagement; Enhancing the Capacity and Synergy in Government; and Enhancing the National Competitive Advantage. <http://www.igov.gov.sg/>

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