# 21



# Knowledge Management in the Public Sector

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# Introduction

This chapter focuses on a review of the current status of KM in the public sector from the practitioner's viewpoint and, with the aid of practical examples, covers the following areas:

- The current challenges in the public sector—and how KM can address opportunities to support, for example, doing more with less, demonstrating more cost effectiveness in operations and delivery through a combination of people, processes and technology enablers.
- The status of KM in the public sector and the knowledge-based economy a set of broader observations and personal views from the KM practitioner's side with examples of best practices that have been achieved. Consideration will be given to the aspirations and potential impact of KM.
- Recommendations for implementing KM in the public sector—with a structured set of proven best practices from multiple engagements by practitioners. It should be noted that these practical guidelines should be of equal value to the private sector when considering the introduction of a KM programme or re-energising a current one.

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J. Syed et al. (eds.), *The Palgrave Handbook of Knowledge Management*, https://doi.org/10.1007/978-3-319-71434-9\_21

# The Current Challenges in the Public Sector and How KM Can Help

At the public sector and government level, KM could be defined as leveraging knowledge for improving internal processes, for the formulation of sound government policies and programmes and for efficient public service delivery for increased productivity (Misra 2007). KM has been present in the public sector and in government for over 20 years, with mixed results achieved to date. However, the knowledge and information challenges facing the public and government sectors are as critical as they have ever been, if not more so, with the ever increasing need to deliver better customer services and experiences, more demand on financial accountability and stretched annual budgets. Thus there is pressure to deliver more with less, and this should allow KM to develop again.

These challenges are further exacerbated by the need for more information transparency and improved security of records and document management. The current challenge of declining oil prices has forced public sector organisations within the Organisation for Economic Co-operation and Development (OECD) countries in particular to develop more knowledgebased initiatives and to become effective organisationally (Biygautane and Al-Yahya 2013a, b, c).

Taking a fresh look at how the full scope of KM, with a structured and more holistic approach, can help address public sector challenges, it should be encouraging to in-house KM programmes and practitioners that a lot of positive interventions can be made and lessons learned from past attempts.

The following section presents a range of highlighted public sector challenges and opportunities for performance improvements where KM enablers can provide support. It is also worth noting that these challenges and supporting KM enablers are also applicable to KM programmes in the private sector.

The following considerations are worth noting. The term 'KM enablers' or solutions refers to a broad set of themes including those based on people, process, content and technology, and we should always keep as holistic a view as possible. For more details on real-life applications of these themes, please refer to Chap. 18, 'KM and Organisational Performance with a Case Study from PDO'. Technology solutions have always been aligned with KM, but when focusing purely on information technology (IT), which in the context of KM is concerned primarily with information, content, document and records management, a large number of programmes have failed to deliver. The richness of a blend of other broader areas such as people, cultural change, learning and process methods is equally important for success, as will be discussed.

# Public Sector Challenge: Decision and Delivery Making

There is a significant need in the public sector to deliver better value for money in services with improved and more effective delivery. In addition, the public sector needs to be more agile to respond to customers' requirements and to reduce the response time to key issues and critical demands. However, within local government, delivering more cost-effective services that make better use of the available knowledge, information and data is a challenge (Schutte and Barkhuizen 2013).

With increasing pressure to deliver more with less, the public sector needs to introduce more innovative and effective solutions and reduce decisionmaking time and the level of bureaucracy. When the World Bank first implemented its KM solution, the culture had a top-down, centralised organisational structure, which hindered the effectiveness of knowledge sharing and ability to deliver (Welton 2015).

KM Value Opportunity By enabling faster access to the right expertise and skills more effectively, KM can help foster better-informed decision making, leading to actions being taken more quickly and improving overall responsiveness. The people or skills profile, or the Yellow Pages, is a common feature on most organisations' intranets, but a focused effort to engage with staff is needed for the full benefits to be realised. This is where the change management skills of the professional knowledge manager can come into play, encouraging its usage and helping to connect decision makers and experts more quickly.

In addition, by facilitating lessons-learned activities, the public sector can save money and time by not making the same mistakes, and improved sharing between departments can help delivery bodies to be better aligned. For example, KHDA, a Dubai Government entity, implemented a KM programme to improve policy-making and internal decision making (Biygautane and Al-Yahya 2013a, b, c).

# Public Sector Challenge: Better Cost Savings and Quality Improvements

The public sector is increasingly coming under pressure to reduce costs, and combined with the introduction of more performance-related targets, continuous improvements are needed to meet demands to deliver more with less. Staff needs to demonstrate more responsiveness and increased productivity, and to multitask and achieve performance targets more effectively.

KM Value Opportunity KM can assist by helping to create the right behaviours and culture to capture performance ideas with focused methods which may not require IT. These could include knowledge cafes, after-action reviews and knowledge marketplaces. By bringing staff together and developing a more supportive culture, new ideas can be generated and shared to deliver more cost-effective services and prevent wasted expenditure. For example, the Dubai Courts in Dubai introduced KM with one aim being to increase productivity and quality of service (Biygautane and Al-Yahya 2013a, b, c).

More cost-effective and flexible collaborative IT solutions could be considered to deliver solutions, including 'cloud based' pay as you go options. The need for long and costly in-house developments should be reconsidered against 'off the shelf' cloud solutions with minimal configuration. From a business custodian perspective, KM, not IT, should advise and own the collaborative and new social workplace space, review the options and steer the strategy and future direction. In effect, KM can help to streamline and 'lean' IT solutions.

# Public Sector Challenge: Adopting the Required Culture and Behaviours

With increasing pressure to achieve challenging performance targets in the public sector with reduced supporting resources, the morale and overall supporting culture can become more constrained and uninspiring. This, along-side the departure of an experienced, maturing workforce and a perceived lack of incentives to share individual knowledge, has led to a more siloed approach to working with reduced learning and knowledge sharing across departments. Local government can sometimes practise insufficient knowledge sharing with central government and can promote siloed behaviours (Schutte and Barkhuizen 2013).

Another observation is that public sector and government departments traditionally work on an autonomous basis and do not have any incentive to better communicate or collaborate with one another for cost efficiencies. These cultural barriers will be hard to change (Warlock 2002).

KM Value Opportunity Through learnings captured from multiple KM engagements, a range of knowledge transfer methods could be introduced to encourage a more supportive learning and knowledge sharing culture.

These would require participants to communicate openly and share their experiences and could include areas such as lessons learned, peer assists, knowledge harvesting and storytelling, and anecdotal enquiry. These methods should all be part of the KM practitioner's 'toolkit' and could support a broader change management programme. Incentives should be introduced to encourage knowledge sharing, but not necessarily financial ones. Earlier research has proven that for KM, peer-to-peer recognition and appreciation for valuable knowledge shared is far more effective than a nominal monetary offer. KM can provide significant support for the global transition needed in the Middle East to a knowledge economy through organisational excellence and behavioural changes (Arab Knowledge Report 2009).

Introducing new internal social workplace tools such as Yammer, Huddle and Facebook in the workplace will demonstrate a move towards a more modern work environment. This coupled with flexible working conditions should encourage more collaborative behaviours and a social working culture. It should also make working in the public sector a more attractive proposition for millennials and the younger workforce now entering the job market. A full range of practical and cost-effective KM methods and tools such as 'lunch and learn' and communication aids can help promote behavioural changes (Serrat 2010), all of which can help build the 'learning organisation'.

#### Public Sector Challenge: Loss of Critical Expertise and Know-How

As is common in the Western world and developed economies, there is continuing loss of critical skills and expertise which is exacerbated by a rapidly maturing workforce, as the majority of 'baby boomers' begin to retire. Within the public sector there is a need to identify and capture these skills and key lessons learned more efficiently with knowledge transfer of departing staff. However, a key challenge for most organisations is to identify where key expertise resides, and to determine how to access it quickly before they depart—that is, how to ask the right questions of the right staff? Again using the example of the oil-dependent countries of the Gulf Cooperation Council (GCC), they face a particular challenge with the departure of experienced technical expertise and skills with job cuts. This 'rented knowledge' is then lost to the organisation due to poorly structured or nonexistent KM solutions (Biygautane and Al-Yahya 2013a, b, c). KM Value Opportunity In order to assist with this challenge, KM should offer a range of knowledge and skills-based mapping techniques to identify key expertise areas and then focus on prioritising needs. A common approach which could fall under the KM umbrella is social networks analysis (SNA), which has been available for a number of years. This can demonstrate extra added value to the knowledge manager and also should be aligned closely with the human resources (HR) department for succession planning and training needs analysis. By undertaking such an exercise, the organisation should become better prepared to manage the gap created by critical knowledge departure.

The importance of better managing an organisation's expertise and talent was recognised by the World Bank, with a focus on building external networks to provide policy advice with improved global linkages (Welton 2015). The skills, expertise and knowledge of the public sector workforce is an important central resource which should be protected as a key asset. There should be a clear knowledge retention process put in place to preserve the 'institutional' memory of departing staff and pass it on to new staff (Cong and Pandya 2003).

In addition, KM can play a more dominant role in the off-boarding process, which appears to be handled very poorly in both the public and private sectors. The KM discipline can introduce the concept of structured knowledgeretention interviews, that is, asking probing and reflective questions of selected departing staff, to ensure that key 'knowledge nuggets' are captured. Furthermore, as mentioned above, by implementing a well-managed people skills finder with a solid enterprise search capability, it will be easier to identify, capture and nurture critical skills in good time before key staff leave.

# Public Sector Challenge: Better Management of Content and Information

Within the public sector there is increasing legislation for improved compliance with document, records and information management (IM) guidelines and standards, which is adding increased work demands to IT departments. In addition, increased information management risk and security measures are needed to safeguard information and data. On the other hand, there is pressure for access to records and data for e-discovery together with acts such as the Freedom of Information Act. KM Value Opportunity A structured approach to KM should include closer integration with the information management section of the IT department, through an integrated KM operation model. The KM department should take a broader view of 'explicit' knowledge content sources and ensure they comply with its IM standards. KM should focus on better management of unstructured content, blending both more tacit and explicit knowledge sources, and give them the same level of protection as more formal records and document management. This means complying with a standard approach to information classification, categorisation, meta data tagging and document versioning. However, care should be taken that KM initiatives do not focus solely on IT, as the KM vision can only be delivered with personnel buy-in (Welton 2015).

Additional benefits would be derived from ensuring that KM is an integral part of the organisation's enterprise content management architecture for unstructured data. At the Road and Transport Authority (RTA), Dubai, fresh knowledge was classified, indexed and stored with the support of electronic data management systems (EDMS) together with the intranet portal (Biygautane and Al-Yahya 2013a, b, c). Supported by an enterprise approach to search, KM should also focus more on content ownership and authorship, thereby allowing organisations to have quicker access to the right content at the right time, in the right context.

UK electronic (e-government) initiatives to better serve clients led to a major rethink of how the services and supporting information produced can be better utilised to meet the needs of both citizens and businesses (Warlock 2002). This helped to raise the profile of KM in the UK with a more strategic approach that began at senior levels in central government.

# Public Sector Challenge: Learnings Not Reused Across Departments

In public sector organisations where there has been little or no effort to implement KM, and where there is insufficient emphasis on the importance of delivering proper lessons learned and knowledge transfer, it is not surprising to see the same mistakes repeated. This can be a very costly exercise in terms of time, resources, people and health and safety. Lessons learned and best practices are not openly communicated and shared, leading to a large amount of organisational ignorance, duplication of efforts and wasted public funding expenditure. KM Value Opportunity The KM department should introduce or re-energise a dedicated effort to deliver a robust lessons learned and best practices programme. Adopting a best practice approach, the KM team should actively lead and deliver such knowledge-capture events and act very much as hands-on knowledge facilitators and 'learning' catalysts. In addition, events such as lessons learned, peer assist, knowledge harvesting and knowledge cafes can be delivered very cost effectively and don't require expensive IT involvement. Lessons learned, best practice capture and peer assist have facilitated well-publicised successful achievements by British Petroleum (Collison and Parcell 2012).

By creating a supportive environment for sharing lessons learned and best practices, KM can help to quantify the real value achieved by cost savings or cost avoidance to bring about significant performance improvements. The outputs of key lessons and best practices can be published as quick 'snap shots' or learning knowledge cards for broader communication and ideally be integrated into the organisation's e-learning and training curriculum for 'just in time' or 'any time' learning, most probably through the corporate intranet. Another objective of running the KM programme in Dubai Police (DP), Dubai was to help improve the creation, transfer and knowledge sharing both internally and externally between DP and the wider Dubai Government (Biygautane and Al-Yahya 2013a, b, c).

# Public Sector Challenge: Poor Collaboration and Poorly Performing Communities

Across the public sector and government, research has found that on the whole there is poor collaboration and networking not only across departments but internally within functions and between teams. Within local government, an additional challenge is for more responsiveness to customers at the community level, with more social identity needed (Schutte and Barkhuizen 2013).

A combination of 'not-invented-here' syndrome and a lack of incentives or willingness to share has led to quite a siloed work mentality. It was found that staff feel reluctant to either ask questions on internal open discussion forums or share insights and experiences outside their immediate team or department. Communities tend to be informal and the outputs are not readily shared. This leads to a lot of duplication of effort, lessons not shared and operational advantages not being exploited.

KM Value Opportunity KM can help to promote and catalyse a more dynamic and open collaborative culture with a blend of people, content, process and technology. Key to this is to encourage the organic growth of communities, networks and forums to help public sector organisations become more agile. Using the proven communities of practice methods can improve peer-to peer-networking, supported by easy-to-use community tools such as a SharePoint. Good user design is critical for buy-in. By introducing targeted communities, organisations can improve knowledge sharing and more efficient cross-work, and allow for expertise to be communicated and insights shared more effectively. The World Bank realised the importance of communities of practice and achieved success with an educational sector to encourage innovation and entrepreneurialism (Carayannis and Laporte 2002). By supporting communities and collaboration through good KM, the aims of providing local communities with improved social networking and social identity can be developed (Schutte and Barkhuizen 2013).

# The Status of Knowledge Management Within the Public Sector

Although KM has existed as a learning and performance improvement solution for over 18 years, research suggests that its impact in the public and government sectors has been limited to date, with some notable exceptions. The promises that were made during the late 1990s for the role of KM in a strategic sense should today be playing a more dominant role in the vision of the knowledge-based economy and more transformational e-government. To date, this has not come to fruition. But significant opportunities do exist for KM to regain its former profile and deliver benefits realisations and should be explored. The demand is perhaps greater than ever in the public sector and government in dealing with the challenges created by the new knowledgebased economy, with increasing international competition from organisations offering competing services (Cong and Pandya 2003).

Best practice research in Australia also found that increasing operational demands for closer citizen engagements was driving the need for better KM. Organisations may not use the term KM but are indeed implementing organisational learning to improve delivery.(Australian Government, Information Management Office 2004).

Some evidence from research seems to indicate that the public sector is currently falling behind in fulfilling the earlier promises of KM (Cong and Pandya 2003). Thus there is an opportunity to either restart or introduce KM with a clearer vision around a more collaborative and learning approach using the platform of a more flexible, open, 'social' workplace that needs to be embedded with expertise, skills and learning.

Research points to the role of large IT vendors and management consultancies that promoted early KM (Release 1) in order to sell hardware and services. These initiatives were primarily top-down managed efforts, with the aim of building large central knowledge bases of data and information management—not true knowledge and learnings. This inherently meant the use of extremely expensive and cumbersome document management systems, the majority of which delivered little or no benefits realisation. Central government policy was focused on a command and control approach to information management and document management, which unfortunately saw burgeoning KM practices absorbed into this field.

In fact, first-hand observations were made of wrongly named and costly 'KM' solutions that failed, which in reality should have been called document and information management projects. One of the key reasons for this was that people's working behaviours and concerns were ignored. Demotivated public sector staff were expected to follow regimental document and records management compliance processes that were almost unworkable in the real world. In addition, the large management consultancy and IT services companies in the early 2000s had an interest in selling large, expensive consulting engagements, to push the role of KM as a centrally managed knowledge-based programme, capturing all staff's knowledge in one centrally controlled 'body of knowledge' stored in very expensive IT servers with supporting maintenance contracts.

There appears to be a lack of awareness of the benefits KM can bring to improved performance which has hindered progress (Cong and Pandya 2003). Here the role of communication, change management and training is key to improving the understanding of the value KM can offer. To date, the majority of KM initiatives have been taken on a project-by-project basis as opposed to a more widely sponsored government departmental or countrywide plan. This needs to be rectified with senior decision makers taking responsibility to combine KM with wider e-government policy initiatives (Misra 2007). Crosspublic sector and central government learning has occurred in only very limited fields, despite some early valiant attempts in the UK, some of which are discussed in the following section.

# Examples of Good KM Practices in the Public and Government Sectors

There have been some notable attempts to deploy a sustainable good practice approach to KM that should be recognised. In addition, the international economic development agencies and banks were exemplary in their efforts to promote KM for the public good. Unfortunately, in a number of cases government funding in the UK and the wider field has since been either withdrawn or reduced, so relatively few new innovative implementations have been identified to date.

**NHS/UK** The National Health Service (NHS) delivered a very active and focused KM programme and, notable for excellent KM, an NHS e-library which contained a comprehensive knowledge base of all things related to KM, including method toolkits and best practices. This was used by KM practitioners worldwide. In addition, focus was placed on lessons learned, after-action reviews and storytelling to promote knowledge sharing and collaboration between departments (NHS and Department of Health, UK 2007).

**Improvement and Development Agency (IDeA) UK** The Improvement and Development Agency (IDeA) Knowledge Programme was an initiative which aimed to join up the thinking of more than 2.5 million staff and 21,000 elected members in over 400 local authorities in England and Wales. KM toolkits, guides and aids were produced and made freely available (IDeA Development 2008). The agency was a keen supporter of KM and supported a good range of initiatives and programmes including knowledge transfer process methods and communities of practice. Communities were a particular success supported by IDeA, to help link local councils in the UK. At one stage it was estimated that 26,000 members were connected across 600 communities (Dale 2009).

**Department for Environment, Food and Rural Affairs (DEFRA) UK** A supportive approach to KM was adopted by the Department for Environment, Food and Rural Affairs (DEFRA), sponsored by the information management department, and the focus was placed on the adoption of SharePoint as the preferred platform. In addition, a strategic approach to information and document management was introduced with KM alignment. Noteworthy were the admirable attempts to bring together central government departments who had an interest in KM and SharePoint in an informal community to share leanings and best practices.

Asian Development Bank (ADB) The Asian Development Bank (ADB) was a keen sponsor of KM to foster economic and social development and had an active KM programme aligned with other institutions to improve knowledge sharing (Serrat 2010).

Asian Productivity Organisation (APO, Tokyo) The Asian Productivity Organisation (APO) was another strong supporter of KM and developed a comprehensive range of solution toolkits to encourage knowledge transfer and learning, some of which are available online (Young 2010).

Swiss Agency for Development and Cooperation The Swiss Agency for Development and Cooperation is a government-sponsored agency that was instrumental in using best practices KM to support economic growth and health in the developing world. A rich and comprehensive set of KM transfer and learning aids were also produced including practitioner toolkits, posters and guiding principles Swiss Agency for Development and Cooperation (2009a).

**Indian Government** In another proactive example, India has taken the unique initiative among developing economies of setting up a national knowledge commission for leveraging knowledge for economic development (Misra 2007). This has been followed with national recognition for exemplary KM implementations, and the recent introduction of on-site certified knowledge manager (CKM) certification training with the KM Institute (KMI) shows the importance attributed to KM.

# KM in the Knowledge-Based Economy

KM has an exciting opportunity to rise again in the public sector and play a crucial role in supporting nations' ambitions to develop and be prepared for the knowledge-based economy. Within the realm of e-government, emphasis should increasingly be placed on the importance and needs of the knowledge worker in the knowledge economy. In the context of the public sector and government, KM should be further defined and positioned as helping to exploit knowledge for improving internal processes, and formulating good government policies to support more efficient public service delivery (Misra 2007).

With public sector budgets currently constrained and with the need to be more competitive, more focus should be placed on managing and combining more effectively human capital assets such as learning, people and intellectual capital (Kelleher and Levene 2001). A renewed aim to develop closer ties between KM and HR departments is advised, with an emphasis on identifying, nurturing and protecting the organisational human capital. The concept of the knowledge economy is not new and it is indeed a global phenomenon, but many still face the challenge of not being able to overcome the barriers to effective knowledge sharing and collaboration (Kelleher and Levene 2001).

Preparation for the knowledge-based economy and delivering on policy can be seen as very high priorities in the Middle East and particularly the GCC, where there is now an urgent demand to become less reliant on 'petro dollars' as a sustained drop in the cost of oil will have long-lasting effects on future economies. These nations and relevant governments need to prepare quickly for the significant changes required to become more knowledge based. They are challenged by both fast-growing and much younger populations (millennials) now looking to join the workforce who need better education and more jobs, and departing experienced staff now retiring or highly technically skilled expatriates being laid off due to energy sector downturns. To address this, the majority of GCC countries are now producing mid- to longterm economic visions focusing on developing and trying to be prepared for the knowledge based-economy.

For example, in the Oman 20/20 vision the emphasis is increasingly on in-country value (ICV), which considers the total spend retained in-country for economic and social development. Of interest to KM is the aim to develop human resource capabilities, reducing dependency on external experts and improving the skills base of Omanis (Strolla and Phaninder 2013).

Knowledge is seen as central to achieving sustainable human capital development in the Arab world and will require the mobilisation of resources and capabilities to build the desired knowledge society. Key to achieving this is creating an 'axis of action' towards building the knowledge society. This will include the transfer and acquisition of knowledge, enabling environments and human development (Arab Report 2010/11). However, a lesson learned of note when considering the introduction of KM is the need to dispel some of the vagueness around the term KM and promote its crucial role in the development and sustainability of organisations. One should focus more on improving collaboration and human interactions, not only on reliance on technology (Biygautane and Al-Yahya 2013a, b, c).

As has been demonstrated, the opportunities for the full breadth of KM to add value to this vision of the knowledge economy is very rich, using the proven strategies, processes, methods, learning and tools. Ambitious and inspirational knowledge managers should embrace these opportunities.

# Recommended Implementation Steps for Introducing KM in the Public Sector

This final section offers some practical advice for the KM practitioner, including ten implementation steps to consider when introducing KM or attempting to revive a prior KM programme. These recommendations and directives, although tailored to the public sector, will be equally valid for KM programmes in other sectors and represent a suite of best practices which have been proven to work.

#### Step 1: Deliver a Maturity Assessment and Business Case

**Recommended Activities:** The ideal starting point is to undertake a KM maturity assessment to capture the current state of KM in your department or operations and ideally benchmark against best practice, covering the key dimensions of people, process, content and technology. There are numerous variations of KM assessment tools available, and development agencies such as the World Bank have also set up a KM secretariat and produced a knowl-edge assessment methodology (KAM) to help assess the current state (Misra 2007).

Such an assessment could take the form of a more shortened 'health check approach', and a key outcome of the assessment should be to identify and prioritise areas where KM can make a real difference with a focused effort. The KM audit is needed as an accurate starting point to understand the current state, before undertaking the KM culture change programme (Serrat 2010).

By assessing and prioritising the key challenge in their function or department and mapping potential KM opportunity enablers to them, the KM practitioner can start to create the initial business case for KM. The business case should clearly demonstrate the potential benefits and clear business value for the department, with a focus on solving real business and operational needs and with clear measures of success. Supported by business value analysis, the business imperative can be shaped, focusing on the value needs of the business versus the ability to deliver cost effectively.

You need to be clear in highlighting the key public sector challenges for your department, one which could be providing more responsive and costeffective delivery of services to your customers.

KM can help to establish competitive advantage, effective decision making and innovation by managing the required relevant resources and people's intellectual capital to achieve effective service delivery (Schutte and Barkhuizen 2013).

#### Step 2: Create the Strategy and Framework

**Recommended Activities:** The KM strategy should put in writing, or if you have a current one, then it should be reviewed and rewritten if necessary. The strategy needs to be a workable document with key action-oriented goals, and the output of the KM maturity assessment can feed into this. Key here is to include a KM operating framework model which simply articulates the strategy and should ideally be presented on one page. The KM strategy for the public sector needs to be carefully planned out in order to succeed and deliver on promises. In addition, consideration should be given to creating a generic KM framework for the public sector by understanding and reviewing the multiple types of frameworks present in the private sector (Cong and Pandya 2003).

Ultimately, the KM strategy and the accompanying KM framework are key documents that should include alignment with the overall organisational or departmental strategy and should feature in KM governance (Kelleher and Levene 2001).

If KM exists at a higher government departmental level, then your strategy should be aligned with these key elements and drivers. Within the KM framework the following components should be considered:

- content management: improved management of unstructured information assets;
- collaboration: improved ability to connect and network with communities;
- expertise: improved support for the right environment for experts to share;
- learning: improved delivery of lessons learned and best practices.

The strategy should also include a clear KM definition with guiding principles for your organisation that are aligned with the highest government departmental vision. These could include aiming to foster better and faster decision making, improving collaboration and networking, and turning the department into a 'learning organisation' with the right culture and behaviours. Agreeing on a definition of KM can be challenging; two options are offered for review here:

KM is a conscious strategy aimed at getting the right knowledge to the right people at the right time, and helping people share and put information into action in ways that strive to improve organisational performance. KM needs to focus on creating a culture of knowledge sharing and learning. (Swiss Agency for Development and Cooperation 2009b)

To support our people, connections, expertise and content to increase operational effectiveness through improved collaboration. To enable us to more effectively identify, create, capture, share and reuse the knowledge of our employees & partners at the right time in the right context. To create the right environment and culture for our people to share their knowledge in a smarter way. (PDO KM Code of Practice 2015a)

#### Step 3: Implement KM Governance

**Recommended Activities**: Key to the success of any focused KM programme is the early establishment of the appropriate KM operational governance model. This should also include identifying a KM champion or sponsor at the most senior managerial level possible to steer the decision making and act as the KM ambassador across your department. The creation of a KM steering group with membership from key multiple stakeholders is essential. You should always try to be inclusive with KM and not try to operate it as a solo, stand-alone initiative.

To support the KM governance a clear set of approved supporting documents should be produced, including an all-encompassing KM code of practice, a KM policy and supporting guidelines and procedures. The KM governance should have senior representatives from business and be aligned and comply with the corporate governance model if one exists.

## Step 4: Start Small with KM Pilots

**Recommended Activities:** Following approval from the KM steering group, it is advisable to start or restart your KM engagements with no more than three low-cost, low-risk 'proof concept pilots'. The pilot sponsors should be identified from the business or operations early on, together with influential stakeholders, and the focus should be on three key departmental drivers that need addressing. Recommended areas within public sector engagements, for example, include better access to learnings and best practices, better access to expertise, and better access to information and content to implement policy.

You should not enforce a consistent standard approach to the pilots, as they will certainly have different needs, and ideally you should use existing effective technology or an off-the-shelf solution on a cost-efficient basis to demonstrate the success achieved. Within PDO, following approval to start with KM, the approach endorsed was to start with three small pilots within a specific engineering function where there was a need for enhanced performance due to expanding operations. For more details on the approach adopted for the introduction of the PDO KM pilots, see Chap. 18, 'KM and Organisational Performance with a Case Study from PDO'.

#### Step 5: Focus on People, Collaboration and Communities of Practice

**Recommended Activities**: Based on research and background experiences, it is argued that a key success factor for KM is to address the people, cultural and behavioural change elements, and that any programme which fails to embrace this will probably lead to failure, viewed as another IT project that does not live up to its promise. Within the operating KM team, you should ideally ensure that you have a team member with skills from a learning or HR background who has real experience with the people elements. Identify selected KM 'catalysts' across your department who can act as focal points.

You should emphasise collaboration and networking and build local communities of practice to improve internal collaboration, bringing together subject matter experts and those that need to learn and apply the knowledge. Communities are now a well-recognised tool to help with KM and can be effective in transferring more tacit public sector knowledge (Cong and Pandya 2003). Consider starting with face-to-face collaboration between public sector departments as a low-cost way to reuse and relearn from other colleagues and special interest groups.

In the UK, a good effort was made to create 'knowledge exchanges' as a means of improving collaboration, focused around supporting 'communities'.

The NHS was an exemplary example, creating a Public Health Knowledge Exchange (PHKE) to bring together the wider UK public health community, including forums and blogs (NHS and Department of Health 2007).

Another exemplary effort was the formation of the London Information Knowledge Exchange (LIKE), which was created and mainly self-funded by like-minded knowledge, records and information managers in London. Meeting on a regular basis in the evenings after work, this dynamic community has now grown to be a regular feature on the KM calendar in London.

People profiles has traditionally been a good area for a KM team to promote their services and encourage a better knowledge and skills sharing culture, with notable successes in organisations such as British Petroleum (BP), British Gas and the BBC. At IBM, their global solution, called 'Blue Pages', was credited with creating substantial savings in time and money and helping to connect staff members. The BP solution, called 'Connect', was enabled by the in-house KM team, where it was important to create the right environment for expertise and skills sharing (Collison and Parcell 2012). It is also important to implement a targeted communications effort which provides clear and consistent messages on the value of KM to help gain active support from end-users and customers. The progress of KM should be communicated across the department and ideally across affiliated departments to help raise its profile. A distinguishable logo for KM should be created together with a supporting 'mantra' or slogan during the programme launch. PDO adopted a best practice approach to KM communications and created a new logo and branding during start-up (PDO KM Communications Plan 2015b).

# Step 6: Build the KM Operations

**Recommended Activities**: Successful KM implementation in the public sector is dependent on the correct people resources being dedicated from an early stage. It is suggested that KM programmes fail because the operational KM people resources have not been forthcoming, leading to a lack of capability to deliver the programme. The creation of a small KM team is advisable, supported by a KM champion or sponsor as mentioned above. In addition, the KM operational structure should demonstrate a localised KM presence in the business using a more collaborative approach (Welton 2015).

The KM operating team can be situated in a variety of areas within the organisation, including the IT, HR, organisation and learning, and strategic planning departments. Although being aligned with a business performance improvement area is beneficial, equally important is having the senior sponsorship and budgets made available for implementation.

Examples of the desirable mix of skills and competencies that should be available across a KM team include:

- experience working with diverse and complex business challenges;
- the ability to identify, capture and promote the sharing of tacit knowledge;
- demonstrable experience of successfully working within challenging situations where KM can provide business benefits;
- experience in leading change or transformation projects, ideally with intranets and collaboration tools;
- creative, innovative 'out-of-the-box' thinker with a commitment to continuous improvement;
- confident and effective communicator.

For more details of the recommended KM operational roles which were successfully implemented in PDO, refer to Chap. 18, 'KM and Organisational Performance with a Case Study from PDO'.

#### Step 7: Introduce Selected KM Transfer Methods and Processes

**Recommended Activities**: To support a successful implementation in the public sector, the KM practitioner should consider introducing or reintroducing a selected range of proven KM transfer methods to support effective knowledge sharing, learning and collaboration. In the current context of tighter budget controls, public sector organisations need to look at more cost-effective solutions. The majority of these methods do not require technology and thus can be implemented effectively by a competent KM team. Selected KM methods and processes can all steer towards the generation of the 'learning organisation' within local government (Schutte and Barkhuizen 2013).

KM methods should be integrated into your KM framework and embedded into key departmental processes and procedures. For example, delivering a lessons learned event after each important stage, gate or milestone on a project can raise the profile of KM and add significant value. The methods in the knowledge manager's toolkit include:

- lessons learned and best practice capture
- after-action review
- knowledge harvesting
- capture of key knowledge
- peer assist
- storytelling.

The competent knowledge manager should be able to facilitate or support the delivery of most of the above methods to improve knowledge sharing and transfer of key information. These methods should be shared by all across local government and beyond (IDeA 2008). Another advantage of using a small selection of proven KM transfer tools and methods such as those mentioned is that they don't necessarily have to use technology to be effective (Serrat 2010). A good example of usage, together with facilitation guidance, is widely available on the internet.

In the GCC, Dubai Government entities such as the Dubai Courts, Dubai Police and Dubai RTA have adopted clear processes to support their KM programmes (Biygautane and Al-Yahya 2013a, b, c).

#### Step 8: Consider the Use of Technology to Support KM

**Recommended Activities:** The KM practitioner should assess the available departmental IT capabilities to support KM, with more emphasis placed on collaboration, networking and connecting solutions in the first instance,

rather than looking at large-scale, expensive enterprise content and document management solutions where there are plenty of failed and costly stories of end-user not buying in. It is advised not attempt to develop in-house wherever possible, but to buy and modify off-the-shelf solutions in the first instance, commonly those that are cloud-based.

However, using collaborative technology alone to support knowledge sharing will not fully address the needs of the learning organisation, with the human touch and access to live subject matter experts being crucial to success. KM collaborative tools can assist with faster connection to these experts (Kelleher and Levene 2001)

The newly termed social workplace IT tools that focus on collaboration should be evaluated by the KM team and could include vendors such as Microsoft SharePoint, Slack, Yammer and Igloo. The use of these types of solutions appears to be more intuitive for the end-user, allowing them to work more efficiently with little or minimal training and support. Examples of successful KM technology solutions include people profile management, collaboration teams and project sites, communities of practice and lessons learned knowledge bases.

#### Step 9: Focus on Performance and Value Management

**Recommended Activities**: For any KM initiative that is implemented, it is essential to show the real benefits being achieved by the programme. Similar to large change management and learning initiatives, it's important to have measurements in place to assess progress against the desired outcomes. This is particularly important in the government sector where, in the majority of cases, all expenditure justifications need to be communicated to the general public and key government stakeholders. For the public sector, performance improvements should focus on managing knowledge that could reduce the cost of operations and improve customer services delivery (Cong and Pandya 2003).

KM benefits can be both direct and indirect, and can be measured in terms of improved processes and measurable outcomes. A set of KM key performance indicators (KPIs) should be agreed for consideration. There are numerous metrics available to measure progress, many of which come from the human capital world, and below are some high-level examples of how they could be grouped for evaluation.

Improved customer responsiveness and satisfaction:

- faster access to cross-government departments' knowledge bases to support customers;
- improved responsiveness;
- improved customer and stakeholder satisfaction levels with time to respond.

Internal efficiency and effectiveness:

- reduced time searching for relevant content and subject matter expertise;
- improved decision-making and planning capabilities;
- reduced IT, printing and publication costs.

Competency and personal development:

- improved employee capability development and growth;
- improved employee networking both internally and externally;
- improved personal development as subject matter experts with lifelong skills.

Improved innovation:

- improved communication and knowledge sharing between subject matter experts;
- more supportive environments conducive to innovation;
- bringing people together across departments to work more intelligently and effectively.

For examples of real KM benefits being achieved within an engineer project at PDO and more broadly with other external examples, refer to Chap. 18, 'KM and Organisational Performance with a Case Study from PDO'.

## Step 10: Build a Sustainable Road Map

**Recommended Activities**: Finally, as your KM programme matures it will be necessary to build a longer-term and sustainable road map, and at least a five-year time line should be considered for full embeddedness and business transformation. Key to this is ensuring that adequate resources are maintained within the KM team to work closely with the organisational business. This will include the developmental needs of the KM team to ensure their competencies and skills growth, and it is advised that international KM certification (CKM) be offered to KM staff as part of their individual development plans.

A selected phased deployment strategy should be developed, identifying key areas to focus on over five years, which should be endorsed by the KM steering group and KM sponsor. For public sector organisations, internal collaboration and knowledge sharing should first be improved, supported by a robust intranet. Departments that have a key need and are willing to endorse the KM strategy and provide the required resources, people, time and cost should be targeted and given high priority. As the KM programme matures, consider working more widely with external customers and stakeholders and start to capture, cleanse, review, package and transfer key 'knowledge assets' for the benefit of the wider public.

# Conclusions

The research and the authors' own personal experiences indicate that the opportunities for KM to add significant value to the public and government sectors is still considerable. The past experiences of KM have been variable, with a strong initial focus on what is recognised as Release 1 KM, which was predominantly aimed at attempts to capture copious amounts of explicit data and information in the form of visionary all-encompassing 'knowledge bases'. This was to a large extent driven by the ambitions of IT companies and management consultancies, aiming to sell IT hardware and services. The unfair branding of KM as in the same container with documents and records management led to costly projects failing to deliver, with wastage of public funding.

However, there have been notable success stories in the public and government sectors. A common characteristic found was that these focused more on the improved 'connecting' of expertise, learning and knowledge sharing rather than the 'collection' of information, records and document management. The admirable attempts by both the NHS and local government in the UK to improve collaboration, learning and networking between local offices through communities and knowledge exchanges must be noted.

It was observed, however, that the challenges facing the public sector remain and may be even more pressing today, and with a focused KM attempt following proven best practices and practical implementation steps real added value can be achieved. The focus should be on collaboration, peer-to-peer learning, networking and communities and not IT driven. In addition, with the drive towards better preparation for the knowledgebased economy, there is a real opportunity to be more closely aligned with the human capital agenda and to nurture, build and support this most valuable asset. The proven approaches, methods and processes of the pure KM discipline will prove invaluable to steer continuous performance improvement success.

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