Towards the end of 2002 various activities promoting knowledge and information management in government were perceived to progress without an adequate measure of coordination or overall direction-setting. In January 2003 the Government IT Officers Council resolved to establish a Knowledge and Information Management Work Group. After some meetings and discussions during the following months, the group arranged a conference and workshop for 19 – 20 November 2003. The event provided important input for this document. KIM is a wide subject with many components. In many areas the Work Group is now only at an early stage of its investigation. Substantial follow-up is still envisaged for 2004.

Although it was not the original intention, the focus of this document is predominantly internal to the public service. Future work will have to address KIM involving government’s clients and other stakeholders to a greater extent.

"..the unit of competitiveness in the modern (knowledge) economy should be the (knowledge creating) network, not the company or the sector."

1.1 Abbreviations

COP Community of practice
CPSI Centre for Public Service Innovation
DComs Department of Communications
DPSA Department of Public Service and Administration
ERM Electronic Records Management
GITO(C) Government IT Officers (Council)
HLT Human Language Technology
IDMS Integrated document management system
JIT Just in time
KI(M) Knowledge and information (management)
NARS National Archives and Records Management Service
OECD Organisation for Economic Cooperation and Development
RM Records management
STANSA Standards South Africa

2.  Executive Overview

The purpose of knowledge and information management (KIM) is to ensure that an organisation and its members will know what to do in the best interest of the organisation in any situation that they may encounter. This first document released by the KIM Work Group of the GITO Council describes the field of work to be covered as part of KIM in government and recommends actions needed to develop it further. The value that KIM offers to government is discussed in terms of its contribution to better service delivery (effectiveness, efficiency, economy,
ethics, equity and excellence), as well as to empowerment, integration, collaboration and general relationship with citizens. Some key concepts, such as codified and explicit knowledge and knowledge management are discussed. Further work is necessary though to promote full and shared understanding. There are already significant KIM practices present in government, but these are generally not inclusive of all the links in the knowledge value chain and need to be developed further. A comprehensive vision statement is included, which will be further refined as the investigations progress. Successful KIM will depend on creating appropriate leadership, culture, structures, processes, resources and measures of performance. Furthermore, development of KIM needs to be supplemented with parallel development of decision making processes in general, ensuring proper knowledge utilisation, as well as organisation development that takes cognisance of the evolution of traditional hierarchical organisations into intelligent complex adaptive systems. At this point the focus has very much been on KIM in the South African government. Future work should also deal with government’s clients more explicitly, as well as with joint KIM with other governments, especially in the African Union.
CHAPTER 1. RATIONALE AND BACKGROUND

1.1 Rationale

*Why knowledge management? What is the business case for KM and what value does it add?*

Knowledge management must occupy a central space in the public service if government seeks to be at the cutting edge of policy and decision-making and service delivery is to be effective and innovative. It must move to the centre. However, the understanding of the value-add of knowledge management is very important. Related to this is to find appropriate tools and instruments to measure its results, impact and its contribution.

Knowledge management must support the mandate and business of the organisation, and promotes its outcomes. It is therefore important to emphasise its benefits to the department and its clients.

Processes are needed to put in place in order to have effective Monitoring and Evaluation. Readiness assessment in terms of implementing KM is also very critical. This involves dealing with questions such as "Is the knowledge available? Where is it? Who has it?" and also dealing with stakeholder analysis. KM could be looked at as an activity, understanding its objectives, the sought outputs and outcomes. That makes it easier to map out the indicators for measuring the success of the project or activity.

In summary, the problems/challenges that render government institutions fertile for corporate KM interventions are:

i) The prevailing organisational cultures reportedly hinder the free flow of information and ease of integration of people in different ranks.

ii) The Intellectual capital of all departments is not coordinated and is lost. It is true that important documents that could inform various processes and decision-making are not traceable.

iii) Departments do not know 'what they know' because there are no data bases that give them a grasp of their own knowledge base, that is, a coordinated understanding of what their workers know. Importantly the intellectual capital or knowledge of institutions is in its employees' heads. The downside of the lack of understanding of what officials know is multi-pronged in that there is no proper transfer of skills, restructuring and downsizing efforts have no base, recruitment is not targeted hence no improvement despite lots of new intakes, resources are wasted as competencies are duplicated and people are demoralised as they are not valued.

iv) Related to the foregoing issue, there is no knowledge of and/or appreciation of the competencies already in departments, resulting in the problem of staff turnovers (lots of staff hopping between departments or leaving government for the private sector).

v) The reported lack of capacity in departments, despite numerous costly capacity building efforts, unfortunately is not having the required and ideal impact.

vi) The formation of cross-component project teams is reportedly disruptive to formal line functions in departments where 'silence mentality' still plays a major part. A further observation is that these teams are dysfunctional due to other problems such as the arbitrariness of the criteria on which the formation of the teams is based.
These factors have led to the identification of Knowledge Management as one of key strategic levers and the need for Departments to develop sound KM frameworks to guide their knowledge generation, processing and management activities. Evidently KM is an important aspect of change management.

1.1.1 Justifying Learning and Knowledge Management in the South African Public Service

Public service-wide challenges

Transforming the South African public service for enhanced, integrated and modernised service delivery is imperative and will remain a life-long commitment due to the dynamic nature of citizens’ needs. Although the transformation journey has commenced, progress has been stifled by, amongst other factors, immense backlogs, lack of capacity to interpret policies for implementation, shortage of resources, lack of cohesion, integration and coordination and the capacity to implement.

- Integrated service delivery is a major challenge. The sectoral approach to arranging government for purposes of efficient and effective methodologies of service delivery poses grave challenges at a practical level. There is a need for more integrated planning and decision-making, which in turn requires a more sophisticated understanding of interdependencies and synergies. This calls for more systems and processes of knowledge development and sharing, and links between business areas and planning processes. South Africa needs to accept, in line with global acceptance, that streamlined knowledge collection and simplified knowledge sharing across organisational boundaries furthers an integrated approach to decision making.

- The reported lack of knowledge and information (know-how) on addressing the transformation challenges exacerbates the problem. This is a major disabling factor since, as observed earlier, knowledge is at the core of all government functions and is viewed as the raw material for what government does to meet its mandate. Inaccessibility of knowledge has resulted in frustrations around implementation and execution of projects, which justifies the imperative for the learning and knowledge management intervention in the public service, to ensure that its intellectual capital is managed as a critical asset.

On the other hand the reported lack of knowledge in South Africa is no longer entirely true. It has been proved that some of the knowledge that is required already exists. In attempting to find solutions to its many challenges, each province or department institutes and implements various projects, processes and systems to maximise its efforts. Some of these efforts yield results whilst others fail and in both perspectives valuable information and knowledge have been created.

The problem, to a large extent, is that this knowledge is not documented appropriately, it is not co-ordinated, thus remaining inaccessible for sharing. This results in the costly duplication of efforts (re-inventing the wheel) as each province or department embarks on a ‘solitary’ solution-finding mission rather than learn from one another’s achievements, mistakes and failures. Therefore there is an urgent need to institute a national learning and knowledge management programme as well as programmes in each province, for the purpose of sharing best practices, mistakes, experiences, methodologies, case studies, etc. In addition, there is a need for access to global experiences, practices, etc. for learning.

- A strong impetus for coordinated sharing of information and knowledge is the reported commonality of problems and challenges that confront the various provinces, albeit to differing degrees. This commonality reportedly exists even
amongst different countries. For instance, the complexities around the social grants responsibility have been observed throughout the country. There is a belief that subscribing to learning through sharing of knowledge can empower organisations, including government, to tackle related problems. Knowledge is the ingredient for learning and the latter will be compromised if knowledge is not coordinated, hence the need for a robust learning and knowledge management programme entrenched by a practical framework.

1.1.2 Endless, futile search for information

Globally, it is estimated that, on average, most people spend no less than three weeks per year searching for information that already exists within their organisations, wasting time that could be put to better and more productive use. One of the greatest challenges to managers is to create conditions to ensure that knowledge and information circulates freely within and among government departments and provinces. It is true that knowledge that is hidden is of no value until it is shared.

1.1.3 Document overload, inaccessible and thick documents

Public servants in South Africa have raised the problem of being inundated with reading materials and various thick and inaccessible documents (document overload), against the backdrop of extremely limited time frames and the pressure to come up with solutions and advice quickly. The need for simple, easily accessible solutions and methodologies has been expressed, as opposed to highly conceptual documents. Importantly they have requested access to one another as colleagues who are facing similar challenges across the country, through networking events. They feel that a lot of knowledge is only a phone call away in another colleague, department or province.

1.1.4 KIM is Essential for giving effect to the 6E values in the work place

E-values:

**Effective**: Meeting the objectives and/or fulfilling the purpose.

**Efficient**: Using optimal resources to execute a process and produce output.

**Economic**: Obtaining resources at the best price/cost and producing outputs at the best price/cost to the business.

**Ethical**: Acting within the law, in honesty and integrity, upholding high morals.

**Equitable**: Fair to everybody concerned; reasonable, unbiased, just, devoid of favouritism.

**Excellent**: Output that is likely to exceed expectations; exceeds normal standards; the best, or close to the best that is humanly possible.

The creation, conservation, transfer and utilisation of KI are complex processes. Deliberate, concerted KI management can increase the effectiveness of these processes.

**Empowerment**

KIM contributes to empower and enable people, e.g. by creating knowledge workers.

**Integration, collaboration**

Improved integration and collaboration through better understanding and culture of sharing.

1.1.5 Better knowledge sharing

1.1.6 Relationship with citizens

Sharing KI with clients/citizens leads to improved relationships, understanding of Government offering and value added delivery, i.e. an
extended/increased/improved knowledge society.

1.1.7 Better KIM for better government

Knowledge/Information

⇒ quality decisions

⇒ suitable action

⇒ better government

KIM promotes better understanding of our –

a. capabilities (what the public service is capable of; understanding its systems, strengths and weaknesses);

b. efficiencies and inefficiencies;

c. clients’ needs;

d. support networks and resources;

e. strategic goals and objectives;

f. performance and governance requirements;

g. decisions options.

KIM a crucial building block in service delivery architecture

Figure 1: Capacity needed for service delivery

![Service delivery and Business processes diagram]

1.1.7 Towards a KIM vision

Prerequisites for a quality vision statement

A quality vision can be a powerful force that draws you towards your goals. The vision should be -

• developed by leaders. Good leaders listen and explore the world, then bring the inputs together in a powerful coherent vision;

• shared by the team who then agree to support it. That creates a vision community which must work together to bring vision to reality;

• comprehensive and detailed;

• long term;

• positive and inspiring;

• challenging to the vision community’s skills and capacity;

• consistent with the vision community’s values.

Everyone in the vision community must -

• know how they are going to contribute to realising the vision;

• know what preconditions and sacrifices will be needed;

• accept the vision as worth the effort despite sacrifices that are needed.
Vision statement
The vision is of a public service where the following have been established and achieved:

Leadership
Leaders in the public service who have knowledge and appreciation for KIM, who support and use KIM practices.

Structures
Top level structures that can promote coordination, integration and KI sharing.
Structures in all government institutions that allow excellence in KIM in each institution.
Communities of practice for all major disciplines in government.

Processes
Well-developed processes for all links in the KIM value chain, that will - .
- drive strategic planning within government.
- facilitate integrated governance, including effective and efficient interdepartmental communication between government and all its spheres.
- support wider government goals such as empowerment and transformation,
- facilitate growth and development, positioning South Africa to take advantage of the opportunities of a new economy,
- support e-government goals, such as eliminating duplication of information,
- together with a framework and a knowledge-base manage our knowledge assets, making the KIM function the preferred supplier for all government knowledge and information

Culture
An organisational culture that will recognise the importance of KIM and cause members to behave accordingly, making us a knowledge driven organization

Measures
A comprehensive performance assessment system that will evaluate all aspects of KIM.

Further development of the vision
Some of the statements above need to be fleshed out before they can be used as guidelines for detailed planning. Furthermore, their realism cannot be properly tested before more information about the options for further action is known. The initial steps proposed below are expected to contribute to filling these gaps. The statements above will be revisited in future.

Recommendation:
1. Establish a suitable web portal for the KIM WG.
2. Place the vision statement on the www.
3. Amend and enrich the vision statement as the work of the WG progresses.
4. Develop a statement of strategic intent once the vision statement has matured sufficiently.

1. The Work Group’s immediate role should be to -
   • Develop guidelines and propose strategies with associated implementation plans for cross-cutting KIM issues
   • Monitor the further development of guidelines and support for institutions to enable them to establish successful internal KIM
   • Ensure coordination of KIM related projects with transversal implications

2. In the longer term it should ensure adequate involvement in KIM activities that go wider than only government, including KIM among the client population as well, undertaken with suitable partners.

Proposed actions

A vision for KIM in government. Various statements characterizing a desired future state of affairs were generated and then rated in terms of (a) their importance, and (b) achievability. Error! Reference source not found., Error! Reference source not found. and Error! Reference source not found. show the results. In the tables the statements are put in various categories, i.e. KIM to be made comprehensive, establish a KIM culture, impact to be achieved, uses/applications and quality to strive for.

<table>
<thead>
<tr>
<th>Vision statements with high importance and achievability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
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### Vision statements with high importance and achievability

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<th>Achievability rating</th>
<th>Importance in overall integration</th>
<th>Categories</th>
<th>Uses/applications achieved</th>
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### Vision statements with moderately high importance and achievability

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<td>Citizen and Public servants being knowledge workers for a better life for all in a knowledge economy</td>
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### Vision statements with low importance and achievability

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<td>3</td>
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1.2 Prerequisite for successful KIM

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<th>Business</th>
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<th>Measures</th>
<th>Leadership</th>
<th>Culture</th>
<th>Structures</th>
<th>Processes</th>
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<tbody>
<tr>
<td>Economy, efficiency, effectiveness, growth</td>
<td>Equity, ethics, security, prestige.</td>
<td>Measuring own performance against performance objectives, performance of others, own past performance. Measure inputs, process E6, outputs, outcomes.</td>
<td>Provide scope, vision, mission, goals, strategies. Galvanise role players into development, utilisation, assessment of KI systems.</td>
<td>Values, attitudes and behaviour in support of KI processes such as preservation, sharing, enrichment, also innovation, risk taking, managing change.</td>
<td>Organisation structures that facilitate KIM. Intra and interinstitutional bodies and relationships with mandates to promote and practice KIM and all its components. Enterprise Information Architecture indicating how supporting technologies are linked together.</td>
<td>Processes for operations, management and support (monitoring, maintenance, R&amp;D), with the resources (skills, finances, assets, technology, knowledge) necessary to perform them.</td>
</tr>
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</table>

1.3 Background

Many converging forces, the world over, have caused a shift from the industrial to the knowledge age, from tangible resources to the intangible world of information, knowledge and innovation. Three of these forces are globalisation, the impact of ICTs, including the pace of technological innovations, and the blurring lines between the market and the state. Beyond transforming the world economy and our societies, they are also transforming the role of government and of public service institutions. Knowledge has become the primary ingredient of what government does as the jobs created are more knowledge intensive rather than low skill and repetitive, making innovation one of the most important tasks of government. This has led to more consciousness and a greater need for governments and their institutions to focus on managing their knowledge and on leveraging their knowledge for learning, to be able to offer quality services.

There is pressure for Knowledge Management to cease to be a concept for boardrooms, thus calling for a conscious move beyond conceptualization and defining, to real practical implementation. In a nutshell, government is operating within the knowledge age, in a global context, and must thus embrace the practice of knowledge management and its principles, and organisational learning.

South Africa is not unique to these changes and resultant implications. Like the global community, we are also part of the knowledge and information society. We have are establishing strong links with the continent and global communities, and knowledge has become a critical asset in any organisation-private, public, or otherwise. For the public service in particular, the need to be more innovative in policy and decision-making, and
service delivery, requires that knowledge be preserved and utilised effectively for better results. And most of that knowledge is there, inside government itself, it just needs to be packaged, disseminated, and utilised effectively.

1.4 Global challenges in transforming the public service

We are witnessing a progressive shift from the bureaucratic management model of the past to a learning organisation management model

Public-sector inefficiency due to bureaucracy is a universal problem and this is due to the fact that, whereas departments are vertically organised, many of the services that they have to deliver require complex collaboration between employees across departments, hence the need for “joined-up government”. A major requirement is cross-departmental, cross-disciplinary information access, which is hampered by the “silo-ization” of information repositories, which poses major stumbling blocks to the ideal of an integrated system of government. An “every-department-for-itself” attitude over the years has resulted in incompatible, unconnected information systems whose inefficiencies are legendary and well known. This is as a result of management models where rigid rules and laws have traditionally governed governments’ activities whilst conformity and compliance to them have been rewarded above value-added innovation and intelligent risk taking.

An important observation has been made that most public service leaders who are leading the transformation are products of the industrial age and of the tangible world and have learnt to value what can be counted, measured and assessed. On the contrary, the knowledge intensivity of government jobs today is observable in the responsibilities that officials are called upon to perform, including provision of sound policy advice to government for good governance; providing high quality services to citizens; attracting and retaining talent, and forming sustainable partnerships to deliver modern services to an equally dynamic and sophisticated citizenry.

The background captures the needs that have been expressed and observations that have been made across the public service. It takes into account comments and concerns that were raised by public servants who attended knowledge management workshops that were run in the nine provinces by a joint team from the DPSA and the Department of Communications in 2002 and subsequent engagements with various departments, NGOs, academic and private sector institutions. Various change management initiatives in government departments have revealed numerous factors and issues that confirm that every government department is fertile ground for a sound corporate KM programme.

1.5 Major role players

The institutions that can provide leadership and support regarding KIM include –

- Centre for Public Service Innovation
- CSIR
- Department of Arts & Culture
- Department of Communication
- Department of Public Service and Administration
- Human Sciences Research Council
- National Archives and Records Services
- South African Management Development Institute
- State IT Agency
- Statistics South Africa
- Tertiary education institutions providing KIM education.
• Standards South Africa’s Technical Committee on Knowledge Management

1.6 Prerequisites for successful KIM

The prerequisites for successful KIM are grouped under the headings of –

• value to be derived from it;
• capacity to do it, and
• support for it from stakeholders.

1.7 The Proposed Framework

This proposed framework outlines different strategies that should be regarded as pillars of the implementation of knowledge management in the public service. These strategies and steps that could be taken are not cast in stone and will vary from one organisation to another.

Purpose

The purpose of the framework is to provide practical guidelines and direction for the entrenchment and sustainability of the culture and practice of learning and knowledge management in the public service.

Objectives

The proposed framework seeks to entrench the culture and practice of learning and knowledge management in the public service through:

• Demystifying the field of learning and knowledge management by developing practical guidelines
• Providing different approaches and mechanisms for establishing platforms and forums for learning engagements
• Supporting the establishment and sustenance of a cadre of learning and knowledge management drivers for the public service
• Institutionalisation of the principles and practice of learning and knowledge management to ensure appropriate resourcing and location for implementation.

The framework has been structured into different aspects, each captured as a STEP. Each step has been broken into the following parts: Objective that reflects what each step aims to achieve. Each objective is then linked to essential activities to achieve it and a Policy imperative reflects what should be done within departments to support the implementation of knowledge management.

1.7.1 Establishing an Institution-wide KM Steering Committee

Objective

It is important to have a team of people in each department who are committed to support the KM programme and its intervention from within their components (may have to re-look at the term) and Units. This will assist in developing the critical mass who appreciate the value of knowledge management and who possess requisite competencies. These people will ensure that knowledge management is infused in all their functions, processes and procedures. KM initiatives must be informed by real needs as felt in implementation and this can only be achieved if those needs are articulated by the implementers within specific units/components, hence the need for this dedicated cadre of drivers with appropriate qualities/attributes.
The work of the KM Steering Committee/Board must get the support and blessing of the executive management of the department. No less than two members of the committee should be drawn from the top management of the department.

Activities

- Establish list of attributes, competencies, skills, qualities for people to serve on the Committee and work with units and divisions in identifying potential representatives (in Components) with those attributes. Importantly there will be a need to negotiate with Components to commit such people.
- Organise appropriate training programme for the committee

CHAPTER 2 : KM TERMINOLOGY AND DEFINITIONS

2.1 Understanding and defining knowledge management in the public service context

2.1.1 Tacit vs codified/explicit knowledge

If knowledge has been recorded or documented, it is termed codified knowledge. Tacit knowledge resides in the memory (the brain, and other parts of the nervous system) and cannot be wholly documented. Commonly knowledge has to be codified to be made explicit.

Like data and information, codified knowledge can be digitized. Tacit knowledge can not, e.g. playing a violin or riding a bicycle. Tacit knowledge can not be transferred in total. A violin teacher can provide sheet music, can explain theory and technique, but the pupil only acquires the complete tacit knowledge by practicing and by observing more accomplished players in action.

Practice is fundamental to tacit knowledge acquisition.

Personal knowledge acquisition through practice may take place collectively through “communities of practice” by people sharing similar work experiences thus helping each other to learn. Establishing communities of practice is part of the proposed KIM strategy.

2.1.2 Declarative and procedural knowledge

Declarative knowledge: Knowledge of which we are conscious and which we can express.

2.1.3 Procedural knowledge: Knowledge upon which we draw subconsciously when reacting to situations or making decisions. When you know vaguely where your destination is, you can often not give someone else clear directions on how to get there, but you can drive there yourself.

(We know more than we can tell. We know more than we know we know.)

2.1.4 "Knowledge" vs "Knowing": the paradoxical nature of knowledge

Western cultures initially deemed knowledge to be a commodity that could easily be observed and moved around. First generation knowledge management tended to be based on this notion. Approaches originating in the East have since broadened the concept to one that recognizes that knowledge is inherently part of the individual or group and cannot be transferred as such. This approach holds that knowing is a process rather than a thing. This influences the current thinking on how KIM should be approached.
The World Bank’s report “Knowledge for Development”1 similarly identifies two types of knowledge: ‘how-to’ knowledge (or know-how), such as farming or accounting; and ‘knowledge about attributes’, such as knowledge of the quality of a product, the credibility of a borrower, or the diligence of an employee.

2.1.5 KI can be context-specific

KI can lose much or all of its relevance if it has to be taken from one environment to another. It cannot be assumed that processes used in one organisation will be successful when performed elsewhere. If KI mobility is required, the processes have to be decontextualised.

2.1.6 Knowledge and information management (KIM)

Knowledge and information management can therefore being defined as ensuring that people and organizations know what to do in the situations that they encounter where they have to make decisions and take action.

2.1.7 KI processing

The KIM value chain

The processes that an organisation uses to deal with knowledge can be summarised as in Error! Reference source not found. Although they are represented as a sequence, in real life they often take place in parallel or in a different order.

Knowledge management is about transferring information and best practices from one part of an organisation to another part where it is needed. It is defined in the literature broadly as a conscious strategy of 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 organizational performance. The generic steps in the KM process are: create, identify, collect, organise, share, adapt and use internal knowledge and best practices. Through KM, effort is not wasted on re-inventing the wheel and making unnecessary errors and in this way the organisation gets smarter.

Knowledge management and organisational learning in the public service is needed to:

- Achieve service delivery
- Meet the public service challenge of sustained performance
- Achieve collaboration and common language and orientation
- Make new partnerships and create connections across departments
- Avoid repetition and/or re-inventing the wheel
- Strengthen relationships between spheres of government for effective service delivery
- Enhance knowledge sharing relating to customer and partner needs
- Maximise the potential of the individuals and the organisation

It is advisable to create opportunities for employees to share both tacit and explicit knowledge with other employees who can benefit from the information and experience, and also to encourage experienced employees to relay their successes and lessons from similar projects.

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2.1.8 Relationship between Records management & Knowledge Management

For purposes of this framework, a distinction is made between records management, information management and knowledge management in the context of this public service. This framework only focuses on KM whilst the other two are addressed elsewhere as separate although related and equally important responsibilities.

**Records management** addresses the flow of documents and files in institutions and improves and sustains communication and movement of files between various stakeholders, e.g. submissions (the responsibility of Corporate Management Offices in departments). It is true that a measure of secrecy and security is of crucial importance in this function with access permissions to specific sections for select individuals.

2.1.9 Information Management refers to personnel data/statistics management, including the utilisation of personnel. Access is open to this data although there are concerns for corruption and manipulation and a need for access to be managed and coordinated.

2.1.10 Knowledge Management refers to the management of ‘how-to’ knowledge, case studies, ideas, lessons, methodologies, innovations, solutions, best practices, experiences, etc. and there are no boundaries, no secrecy, protection or security concerns.

However although each has a different meaning must be coordinated separately, there is a need for convergence at a certain point.

Two kinds of knowledge exist in organisations: tacit knowledge which is the informal and uncodified learning that resides primarily in the minds of employees whereas explicit knowledge is formal and codified, residing in paper documents and computer files and can be accessed by employees assuming that they know where to find this information. The documents in this instance are project reports and other informative articles written by individuals which contain best practices, lessons, experiences and methodologies, etc. that can be replicated.

2.1.11 Corporate planning

Whilst strategic planning is about setting your objectives and identifying ways to achieve them, knowledge management is about ensuring that knowledge gaps (what needs to be known to achieve those objectives) are identified and addressed. It is in this context that KM is regarded as one of key drivers for achieving corporate objectives, by growing the organisation’s assets, its intellectual capital, to enable the achievement of those objectives.

It must be noted that this model is applicable at any level (national, provincial, local, institutional, etc)

2.12 Organic KIM

Organic KIM focuses on using the natural contours of the organisation to allow knowledge to self-organise and self-manage, minimising the need for formal structures and thus
saving cost, improving effectiveness and reducing time to deployment of KIM solutions. KIM solutions are seen to be unique to the organisational context in which they are created. Organisations embarking on KIM should not assume that this means they should immediately set up communities of practice, create yellow pages, competence models and the like. Organisations should instead concentrate on adopting a philosophy of what Snowden calls “just-in-time KM”, a deliberate reference to the theory surrounding JIT manufacturing processes.

2.13 Just in time (JIT) KIM

JIT KM focuses on creating an infrastructure in which the informal or shadow organisation can self-organise or self-manage large amounts of knowledge, which we may never need, and enables the stimulation of just-in-time knowledge transfer.

“There are three common mistakes in KM system design: assuming that human beings are always rational, that experts automatically share all of their knowledge on request, and that workplaces can be managed systematically, like a machine.

‘Just-in-time’ KM addresses these mistakes by offering solutions that enhance natural knowledge flows that already exist.”

Examples of “just-in-time” KM are narrative databases, social network stimulation, limiting e-mail use, apprentice systems, and expertise locators.”

ANNEXURE Ennurex), page 72 for more detail.

Promotion of KIM should therefore ideally not be attempted without investigating other business processes as well, with a view of adapting them to ensure maximum benefit from KIM. Introducing KIM furthermore requires that the overall organization of the business be reviewed to facilitate this.

CHAPTER 3: PEOPLE AS PILLARS OF KM

3.1 Database of retired experts

When loss of corporate memory within an organisation has already happened, particularly in a key strategic area, it may be most efficient to seek out and create a database/repository of certain retired employees with an expertise in that domain in order to recoup that knowledge rather than re-create it through other means. There should be a system for tracking down key retirees and/or resigned and setting them up with public servants (on a contract basis) in a mentorship partnership for transfer of knowledge. Those public servants could be offered time out of office, to meet with those key retirees. This could be blocks of time, or certain days a week.

The new Public service training academies could be used to house and host this knowledge repository.

3.2 Actions

- Each institution must have a clear process for identifying those about to retire from the public service as well as a corresponding process for capturing/documenting their experiences and processes they have put in place and broadly to ensure that there is continuity between those people and potential replacements.

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3 Snowden D, The knowledge you need right when you need it, KM Review Volume 5 Issue 6, January/February 2003.
• Serving of notice by resigning officials must be addressed and appropriate lengths of notice service periods be formalised in line with proper transfer of skills and knowledge

• The process of career-pathing must be in place for this continuity management to take place.

• Writing support must be in place, that is, commissioned or permanently employed depending on the situation in each department and related needs.

3.3 Study tours as vehicles for building & strengthening the knowledge base of the public service

South Africa is viewed as a great player on the continent in the public administration and public management arena. There is a great focus on initiatives that are coming out of South Africa, not only by the African continent, but also more and more by the entire world. It is thus crucial to build the country's intellectual assets and experience by continually exposing the cadre of public servants to best practices locally and internationally.

3.4 Resourcing to Drive LKM in the Public Service

The greatest challenge today is the lack of dedicated resources to drive learning and knowledge management, a situation that leaves the responsibility on passionate but un-incentivised people who cannot give the programme their best because it is an ‘ADD-ON’ to their formal responsibilities. This is perhaps the most important and critical part of the framework that will enhance and entrench every effort towards becoming a learning public service.

3.5 Activities

• It is imperative to develop a dedicated cadre/team of champions to drive LKM programmes within their constituencies (provinces and sectors). Learning champions must be passionate and have an understanding of KM and its value-add. They must be recognised as change agents and their role must be formalised as an important step to institutionalising the programme. Importantly, these people are intimately involved in the mandates of their provinces and institutions, and will thus be able to assess the needs and ensure relevance and alignment. This in turn will enable and fast track the entrenchment of the programme in a way that will allow monitoring and evaluation of the entire intervention.

• Departmental budgeting must adequately cater for resourcing of the organisational and knowledge management programme, irrespective of where it is the programme is located. Knowledge management must be seen as a priority and elevated to an equal status as other processes like HR, procurement, information management, etc.

• Each department should have a resourced LKM Unit to coordinate and represent the department on the province-wide Team suggested earlier.

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4 The informality and voluntarism of the programme poses difficulties which can be addressed through putting this cadre in place and equipping them with competencies and skills. Performance agreements should reflect the responsibility. These people should be trained in various aspects of learning & KM. Another great benefit will be from coordination of learning needs by sector and province and keeping contact with the Centre to avoid duplication and exploitation of public sector knowledge by unscrupulous private sector players as discussed earlier.
3.6 Policy imperative

Units with specific posts should be created for Learning Champions/Coordinators in each department, to entrench LKM in the work of each institution, within each department.

3.6 Capacity -Building for Knowledge Management

Human skills and needs

To meet the demands from clients, the work force will have to become more skilled in dealing with KI and will consequently strongly demand the facilities offered by state of the art technology. They will be highly dependent on it for survival in a business environment that becomes increasingly volatile and demanding.

The knowledge divide referred to in Section Error! Reference source not found. could however continue to result in a significant portion of the work force being excluded from growth and development because of being unable to utilize these facilities.

There is a need for a better coordinated approach to deepen better understanding of knowledge management and take departments through in building these capabilities. There are lots training programmes and workshops supposedly geared towards building the knowledge management capacity of the public service. Some of the programmes are notably good, but equally the majority are not directly addressing the knowledge management and organisational learning needs of the public service, as the content is not tailor made. A one-size fits all approach is not appropriate.

Capacity-building and effort towards a quest to foster and create a learning public service, must be anchored on the following:

- Design and delivery of knowledge management curricula that is oriented towards:
  - the policy and functional imperatives of the public service
  - building individual capacity and organisational leadership
- Provision of strategic advice to departments on how to develop and implement knowledge management strategies to advance their organisational goal and interests
- Capturing and dissemination of best practices and latest public sector management practices in order to share innovations across the public service

The essence of the aforementioned anchors is that all knowledge management capacity building efforts must be experiential and innovative in nature, and not rely solely on the traditional training solutions. They must combine both individual, organisational/institutional and leadership levels. Importantly, the use of non-traditional and informal networking, learning networks on specialist knowledge management areas, should be encouraged over and above the training learning solutions. Strategic partnerships with Canada School of Public Service and with DPSA on one hand, and SAMDI on the other, have been established and this will certainly go a long way to design and implement leading edge and internationally tested knowledge management capacity-building.

3.7 Supporting policy imperatives

- Each department should have clear career-pathing and job shadowing processes/programmes to facilitate transfer of skills
• Exit interviews should be taken seriously (beyond superficial filling of forms) and appropriate people with the right skills should be identified to conduct proper interviews.

• A template should be developed that captures questions to be posed to departing officials. This could be supplied well in advance to give the official time to collect information and apply their minds to information. If for unforeseen reasons they leave without an interview, they should be sent forms to fill and send back the department.

• SAMDI, in collaboration with some established training academies and higher education institutions, develop and deliver a knowledge management training programme, customised to the needs of the public service. Every MMS and SMS member should undergo the training programme as part of the competency framework.

• DPSA, working through and with the established knowledge management units, provide strategic and operational advice to departments.

• The State’s Innovation hub, the CPSI, be a laboratory for experiential learning and knowledge exchange and facilitate the adoption of leading edge practices in public service administration.

• Utilisation of Information and Communications Technology (ICT) and business intelligence infrastructure in departments to support knowledge and information management.

CHAPTER 4. PROCESS, PILLARS AND TOOLS AS KM ENABLERS

Using the output of one process in the value chain as input for the next process can be accompanied by processes to ensure that the links in the chain are connected properly. These processes include KI assessment, validation, regulation, contextualization, and enrichment (see Section 0). No additional recommendations are considered necessary under this heading.

Resources required for KIM processes

In general processes convert certain inputs in order to produce required outputs. A discussion on processes is not complete without a discussion of these inputs or resources. Generic inputs consist of -

• concrete inputs of funding, goods and services, labour, technology and codified KI, as well as

• abstract inputs consisting of tacit KI, ideas, values and attitudes.

The discussion below only deals with those resources in respect of which specific action is deemed necessary.

4.1 The KIM Value Chain: KI processes to be managed by KIM

<table>
<thead>
<tr>
<th>Process</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs determination</td>
<td>In the process of determining strategy and resultant capacity needs in the organisation (see Figure 1 page 6) knowledge requirements should be attended to.</td>
</tr>
<tr>
<td>Connecting processes (see next section)</td>
<td></td>
</tr>
<tr>
<td>Acquisition</td>
<td>Codified and tacit knowledge</td>
</tr>
<tr>
<td>Creation</td>
<td>KI can be created by means of</td>
</tr>
<tr>
<td>Connecting processes</td>
<td>Details</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Capture</td>
<td>Recording KI, using appropriate media, adding reference information to assist in subsequent retrieval.</td>
</tr>
<tr>
<td>Organise</td>
<td>Use classification systems and procedures to use reference information to be able to place information at locations where it can be conserved and retrieved later.</td>
</tr>
<tr>
<td>Conserve/ maintain</td>
<td>Ensure KI is kept up to date and obsolete KI is disposed of in an orderly manner.</td>
</tr>
<tr>
<td>Protect</td>
<td>Safeguard KI against damage, abuse or deterioration. Use instruments such as copyright, licensing and barring access to prevent KI from falling into undesirable hands.</td>
</tr>
<tr>
<td>Share/ disseminate</td>
<td>Provide procedures for KI to be accessed. Actively supply KI according to needs and ensure that recipients of KI disseminate it further as appropriate.</td>
</tr>
<tr>
<td>Utilise</td>
<td>Apply KI in all organisational activities to render them more E6 (see Section 0 page 5)</td>
</tr>
<tr>
<td>Assess value</td>
<td>Determine whether available KI is adequate and whether the above processes were optimal. Determine if KI and KIM have improved business performance. Review KI requirements and processes if necessary.</td>
</tr>
</tbody>
</table>

### 4.2 Connecting processes

Linking any two of the above processes often involves some other value-adding processes that are repeated before every next headline process starts. They can increase the ease, effectiveness and/or efficiency of carrying out the following headline process. Error! Reference source not found. describes these connecting processes. They can be deeply embedded in overall operations, so that they occur almost subconsciously and without a need to prompt the responsible functionary to perform them. As such they become part of the organisational culture. KIM will often only manage them indirectly, through creating the appropriate KIM culture.

### 4.2.1 Connecting or forward-feed processes to be managed by KIM

<table>
<thead>
<tr>
<th>Process</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Providing overall directives and boundaries within which processes should be executed.</td>
</tr>
<tr>
<td>Validation</td>
<td>When receiving the output of a previous process, the KI is examined to determine whether it is (a) credible; (b) relevant; (c) sufficiently comprehensive; and (d) current/ up to date. If not it is either discarded referred back for rework, or qualifications are added before it is passed</td>
</tr>
</tbody>
</table>
Regulation | At any point in the value chain, increased understanding of the processes can lead to formulating regulations in the interest of good order in the system. This can take the form of legislation, regulations or other guidelines/directives issued in terms of legislation, stipulations ratified by cabinet, rules mutually agreed, e.g. through adoption by the GITO Council, etc.

Contextualisation | Adapting new KI so that it can be more easily assimilated in the organisation and its existing KI environment, e.g. by annotating, rephrasing, rearranging.

Enrichment | Using the newly received KI, combining and synthesising it with already available KI to produce improved KI.

Conversion | Combination of enrichment of contextualisation, transcribing to another medium, paraphrasing.

4.3 Sense-making: a process to utilize knowledge in the ICAS context

Organisational structures and business processes are two sides of the coin which is the organisation of the future. Sense-making as described here is an approach to creating KI utilisation processes in such organisations.

The sense-making framework

Cynefin domains

<table>
<thead>
<tr>
<th>Unordered</th>
<th>Ordered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex</td>
<td>Knowable</td>
</tr>
<tr>
<td>Cause and effect coherent in retrospect do not repeat</td>
<td>Cause and effect separated over time &amp; space</td>
</tr>
<tr>
<td>Pattern Management</td>
<td>Analytical/Reducional</td>
</tr>
<tr>
<td>PERSPECTIVE FILTERS</td>
<td>SCENARIO PLANNING</td>
</tr>
<tr>
<td>COMPLEX ADAPTIVE SYSTEMS</td>
<td>SYSTEMS THINKING</td>
</tr>
<tr>
<td>Probe - Sense - Respond</td>
<td>Sense - Analyse - Respond</td>
</tr>
<tr>
<td>Chaos</td>
<td>Known</td>
</tr>
<tr>
<td>No cause and effect relationships perceivable</td>
<td>Cause and effect relations repeatable and predictable</td>
</tr>
<tr>
<td>Stability focus of intervention</td>
<td>Legitimate best practice</td>
</tr>
<tr>
<td>ENACTMENT TOOLS</td>
<td>STANDARD OPERATING PROCEDURES</td>
</tr>
<tr>
<td>CRISIS MANAGEMENT</td>
<td>PROCESS RE-ENGINEERING</td>
</tr>
<tr>
<td>Act - Sense - Respond</td>
<td>Sense - Categorise - Respond</td>
</tr>
</tbody>
</table>

No matter how effective KIM processes may become, there will still be areas of incomplete knowledge of some factors to be considered when making a decision. The Cynefin\(^5\) framework offers a process for taking this into account.

Furthermore, it has been shown that, even where KI would allow taking decisions that are largely rational, they are often based on more than just pure reason. Cynefin caters for this.

The model is one proposed by Cynthia F Kurtz and David J Snowden\(^6\). It was developed initially to be used specifically in the KIM context, but is regarded as suitable for decision-making in general. It uses the concept of sense-making as a step preceding decision-making.

in sense-making frameworks no one domain is more desirable than any other; there are no implied value axes. Instead, the framework is used primarily to consider the dynamics of situations, decisions, perspectives, conflicts, and changes in order to come to a

---

\(^5\) Welsh word; name given to the framework by the developers, pronounced “koo-ne-fin”.

consensus for decision-making under uncertainty. As can be seen in Error! Reference source not found., the Cynefin framework has five domains, four of which are named, and a fifth central area, which is the “domain of disorder”. The right-hand domains are those of order, and the left-hand domains those of “un-order”.

4.4 Knowing, Valuing and Leveraging Institutional Tacit Knowledge

To enable and equip each institution to value its employees by developing an inventory of their skills, competencies, qualifications, experiences, etc.7. This will enable them to know 'what employees know’, to know what competencies their employees possess. This will facilitate targeted and effective planning, improved people management, focused capacity planning and development, etc. and enable intelligent people management.

4.4.1 Activities

- Conduct an audit of skills, competencies, experience, training, qualifications, major conferences, workshops, and study visits, etc.

- Generate a searchable, electronic database that will enable skills transfer, which involves finding the person with required information or knowledge8. This would address the issue of emotional intelligence in the way people are managed in departments9.

4.4.2 KI acquisition

Explicit/codified KI: Procedures for acquisition and management of printed material are well established in the public service and are not investigated further. The preference for acquiring material in electronic form is expected to grow. Computer literacy, including proficiency in using the Internet is important. As the risk of abuse of Internet access by employees is significant (not only in the South African public service but in all organizations everywhere) the need to maintain discipline is important. Discipline depends on the enforcement of rules and policies as well as on engendering a spirit of responsibility and dedication to their work among employees.

**Recommendation:**

1. All government institutions should be required to have Internet policies in place that not only enforce discipline through rules and regulations, but also encourages responsible use.

2. A draft guideline that all institutions can use as a basis for compiling internet policies should be made available.

Tacit KI can be acquired through participating in training events and through self-development by observing, reading and/or practicing. What is important is an organizational climate that provides opportunities for and encouragement of such activities. Managers must be sensitized about this need and given guidance on how to create the appropriate climate. The assessment of KIM practices in institutions should include a component that assesses the climate.

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7 Each institution’s intellectual capital is in its people’s heads
8 The inventory is known for re-engineering & rightsizing programmes where institutions must make decisions concerning human assets: who stays, who is made redundant, who is redeployed, what functions to merge to avoid making such decisions in a vacuum.
9 Where human resource related decisions are not targeted people begin to harbour feelings of neglect, lack of clarity, demoralisation and disempowerment as they are not put to maximum use, etc. In many instances managers do not deliberately ill-treat their employees but are prone to mistreat people from a lack of a coordinated picture and understanding of what their employees’ capabilities and competencies are.
Recommendation:

1. KIM leadership training should include guidance on creation of a suitable climate for acquiring new KI.

2. The proposed system of KIM measures (Section Error! Reference source not found.) should include measurement of the suitability of organizational climate for KIM.

4.5 Policy imperative

Each component must be expected to forward required information to the Team driving the database and to send updates on new employees.

4.6 Forces retarding KIM in government

<table>
<thead>
<tr>
<th>Force</th>
<th>Strength rating</th>
<th>Category sharing</th>
<th>Leadership</th>
<th>Systems</th>
<th>Organisation</th>
<th>Culture</th>
<th>Resources</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Silo mentality</td>
<td>4.7 3</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>2 Lack of KM in Performance Agreements</td>
<td>4.4 0</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 No models for measuring and monitoring</td>
<td>4.3 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Leadership</td>
<td>4.3 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>5 Positioning of KM in organization</td>
<td>4.3 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>6 Unwillingness to share both information and knowledge</td>
<td>4.2 5</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Lack of trust</td>
<td>4.2 0</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>8 Lack of shared vision</td>
<td>4.2 0</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>9 Communication</td>
<td>4.2 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>10 Lack of common understanding of KM</td>
<td>4.1 3</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Discounting knowledge</td>
<td>4.0 7</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
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### 4.7 Forces that can promote KIM in government

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Leadership and management are two distinctive and complementary systems of action. Each has its own function and characteristic activities. Both are necessary for success in an increasingly complex and volatile business environment. The real challenge is to combine strong leadership with strong management and use each to balance the other.

Management is about coping with complexity. Its practices and procedures are largely a response to one of the most significant developments of the twentieth century: the emergence of large organisations. Without good management complex enterprises tend to become chaotic in ways that threaten their very existence. Good management brings a degree of order and consistency ... Leadership, by contrast, is about coping with change.” Part of the reason it has become so important in recent years is that the world has become more volatile. “Doing what was done yesterday, or doing it 5% better, is no longer a formula for success. Major changes are more and more necessary to survive... More change always demands more leadership.

Recommendation:

1. Review the guidelines for managers’ performance agreements and the accompanying performance assessment in order to ensure a more professional evaluation of their performance regarding KIM.

2. Review available management development instruments and assess whether they meet the needs posed by KIM.
4.9 KI sharing: Top priority

The analysis done to date shows the need for government-wide integration and sharing of KI as perhaps the highest priority for KIM at this stage. The recommendations in this section may be more important than any of the others.

4.10 Collaboration tools

These tools should be used to their full potential. A facility such as instant messaging has proved to be extremely useful in business.

**Recommendation:**

Guidance should be sought from SITA on better utilization of the full spectrum of collaboration tools available.

4.12 Towards a shared vision of G2G and related functionality (IT)

The proposed approach to KI sharing can initially link into the G2G portion of e-Government strategy. It is important though at the outset to create a shared vision of the total suite of modules that may ultimately be put in place. is a representation of the wider context within which G2G should function.

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<td>Employee to Employee (E2E)</td>
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<td>Knowledge store and sharing</td>
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<td>Human Resources</td>
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4.13 Flexible design (IT)

Flexibility in design of KI systems needs to be built in to allow satisfying needs that are not initially catered for but identified later. The Department of Public Service and Administration has done some initial development of such a system that can be linked to the PERSAL system, but allows the incorporation of other information, as well as, amongst others, the facility to limit access of different users to different segments of the system. The development has the potential to fulfill wide-ranging G2G KI sharing needs. The CPSI has expressed an interest in collaborating with the DPSA to pursue further development to expand the functionality of the system.

**Recommendation:**

The DPSA and CPSI should pursue the development of a pilot G2G portal as they propose. (See ANNEXURES

ANNEXURE A)
4.14 Communities of practice and similar groupings

“There are three common types of communities, which can be found within an organisation and across organisations:

Communities of interest are groups with a mutual interest in a particular topic whose members wish to learn more and foster interest in the subject.

Communities of practice bring together people to share insights, develop expertise and to foster good practice through the exchange and creation of knowledge in a specific area. They are a focus for building specific capability in their organisation and ensuring that this is protected and retained in the organisation as people move on. Formal functions (e.g. Finance, Marketing, Human Resources) are in effect potential communities of practice. For instance there is a strong community of government lawyers ranging across virtually all Government Departments.

CHAPTER 5 CONTENT / KNOWLEDGE / AND KNOWLEDGE MANAGEMENT

5.1 Coordinating The Intellectual Capital and Memory of each Department

5.1.1 Objective

The objective is to facilitate maximum access to and sharing of explicit knowledge and intellectual memory of each department in support of creativity, innovation and efficiency. This knowledge is contained in various formats, e.g. documents, databases, videos, CDs, etc, and it is critical as it gives direction in terms of where each institution is coming from (history), and the route to be undertaken to reach its goals. One observation by officials around the country is that the information is scattered across components and/or institutions, and is often inaccessible, leading to inefficiencies and duplications.

5.1.2 Activities

- Track down, coordinate and organise suitable location for explicit knowledge sources in various formats generated for and by each department (manuals, project reports, databases, etc.) or in collaboration with others (conference proceedings, project reports, workshop/ seminar materials, etc.).

- Establish knowledge repositories e.g. knowledge centre/ Library facility which supports learning and innovation in the department.

- Intranet development and management is important for posting of knowledge sources and that of searchable electronic Knowledge Registers/ databases that add value to their operations and nurturing a knowledge culture (e.g. the study tours register10, Projects data bases, etc.)

- Institute quality control – develop standards on documenting and packaging of sources and documents. Usually it is not easy to locate the person who developed the document hence the need to ensure that, for instance, the Statement of responsibility is in the source (that is, author, project leader and members, etc.) and that title pages, abstracts, pagination, etc. are included to facilitate processing and indexing for easy access and dissemination.

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10 A Study Tours Register reflects who has been where for what purpose and what sources they have brought back from the Tour. This prepares the next delegation on what to expect and what to take and makes them better representatives for the Country.
5.2 Retention and preservation of public service knowledge

“Without adequate knowledge continuity between employee generations, organisational ‘forgetting’ drains intellectual capital and squanders the knowledge asset” 11

It cannot be contested that, the world over, there is a general and continuous exodus of experienced people from the public service to the private and NGO sectors or retirement. Importantly when employees leave they take vital knowledge with them. 12

Government is also, more and more, adopting the strategy of short-term, contractual staffing (contingent workforce) and this increases the velocity of knowledge loss because of the shortened tenure of the contingency workers and the more rapid turnover they create. 13

Without a process in place to capture that knowledge for the benefit of their successors, the problem of knowledge depletion is compounded. Needless to say that the successors take longer to get up to speed, important discoveries and insights disappear and the ability of the public service to respond quickly and intelligently become compromised. The problem is exacerbated when the leadership of the public service exits with this knowledge without it being captured. This calls for strategies to be put in place to address this chronic problem of knowledge depletion due to employee turnover in and retirement from the Public Service.

5.2.1 Policy imperative

• Agreement must be reached within each department on requisite attributes, competencies, skills and qualities for such people

• Departments to cooperate with the KM Team in identifying such people who will act as contact persons for the KM Team. Sincerity is important in identifying capable people rather than people that normally do not add value as this will impact on the component's performance.

• Performance agreements of individuals should reflect this responsibility with clarity on the level and type of involvement, e.g. 10% as a KPA

• Each institution to make special provision for KM related training.

Policy imperative

• All components should support the Library/knowledge centre in its collection development by forwarding relevant materials and other sources and by participating in the selection of relevant books which contain local and global experiences

• The development of mini-libraries which are component-centred should be discouraged at all costs because they entrench silo mentalities and compromise across-component learning. Where some resources MUST be kept within

12 Employees leave for various reasons that can be divided into four broad categories, namely, employee terminations, employee resignations, employee transfers, resignations by contingency workforces (i.e. temporary or contract employees).
components, details of such sources must be forwarded to the KM Team for appropriate indexing, with an indication of the Component that keeps a copy.

- Each department to have in house web page management/development expertise. All departments must ensure that Intranet management works closely and in collaboration with the KM Team (ideally the responsibility should be located within KM). Each component carries the responsibility to forward information about their services and core responsibilities to the web manager and for updating such information.

- Each department should develop standards on packaging of information/knowledge sources to ensure adherence

- Component representatives should ensure that the packaging of component documents within their components is in line with standards before they are posted on the intranet or deposited in the Library and that appropriate training is organised.

5.3 The growing importance of electronic records

The growth in use of electronic records in the form of written documents, video and sound recordings is expected to accelerate now that their legal standing has been established more solidly by the Electronic Communications and Transactions Act. The review of electronic records management guidelines by the task team established by the Work Group is therefore important.

5.4 Growing neglect of paper records

In many cases there is a growing neglect of paper records, placing government at risk of losing important KI. Paper records management should be integrated in the mandate of the electronic records management task team to ensure that records in all media are managed in an integrated fashion. Its mandate should be expanded to include all aspects of content management.

Recommendation:
The KIM WG submit proposed RM policies and guidelines for government to the GITO Council for acceptance when they are ready. The recommendations should cover paper as well as electronic records and other facets of content management.

5.5 National Library

The National Library, in collaboration with the National Film, Video and Sound Archives has compiled a proposal for developing regulations/ guidelines to ensure proper management of electronic publications (including written, audio and visual formats). Funding is being sought. The Melon Foundation in the USA has been approached.

Recommendation:
The National Library’s progress with developing processes for regulating electronic publications be monitored.

5.6 Integrated document management systems (IDMS)

Many institutions have, or are about to implement IDMSs with which they can potentially manage significant portions of their explicit knowledge. IDMS implementation is an involved exercise, as it covers not only putting new software into operation, but also
revising many business processes and reorienting staff. This then requires extensive change management.

At the time of writing SITA’s proposed IDMS strategy has not been received. It was understood that part of this strategy would indicate the nature of support that SITA would offer to its clients in this regard.

5.7 Tacit knowledge

The retention and dissemination of tacit KI obtained by individuals through visiting other organizations, locally and abroad, is an ubiquitous problem. Organizations often have difficulties ensuring that such individuals document their experiences and brief their colleagues. The establishment of narrative databases is a useful instrument for capturing the knowledge and insights gained. The utilization of a range of media wider than just written text may offer an enhancement by making it easier to capture the KI, say as audio or video recordings that become part of the institutional record.

Recommendation:

1. Government recognizes the use of alternative media such as audio and video recordings as legitimate instruments for visit reports.

2. The Content Management Task Team in collaboration with the G2G project team (Section 0) draft guidelines for organizing records in all media in a way that ensures that they can be made widely accessible, across institutions in government.

5.8 KI protection

Security measures developed elsewhere in government around physical security, information security, IPR are not investigated by the Work Group on the assumption that they are dealt with adequately elsewhere.

Indigenous knowledge (IK) is similarly not included in the scope of this document. The WG may consider investigating IK in future, although the work done by the DTI and others to manage IK nationally may be adequate. It is assumed that many of the recommendations in this project will be neutral regarding the kind of knowledge to be managed, thus applying to IK as much as to other KI.

5.9 KI sharing: Top priority

The analysis done to date shows the need for government-wide integration and sharing of KI as perhaps the highest priority for KIM at this stage. The recommendations in this section may be more important than any of the others.

5.10 KIM STRATEGY DEVELOPMENT FRAMEWORK

High level

(High level. See next table for detail)

1  DEMONSTRATING KIM’s VALUE
   1.1  Needs & opportunities
   1.2  Track record
   1.3  Measurement

2  DEVELOPING KIM CAPACITY
   2.1  Purpose
   2.2  Processes
1 DEMONSTRATING KIM’s VALUE
  1.1 Needs & opportunities
     1.1.1 In the public sector
        1.1.1a National & provincial
        1.1.1b Local government
        1.1.1c Other public entities
     1.1.2 Wider than the public service
        1.1.2a Business
        1.1.2b Private citizens
        1.1.2c Other countries
  1.2 Track record
  1.3 Measurement
     1.3.1 KIM practices
        1.3.1a Proficiency
        1.3.1b Attitude, perceptions
        1.3.1c Coverage
        1.3.1d Track record (outputs, outcomes)
     1.3.2 Effectiveness of KIM training
     1.3.3 Extent of implementation of WG recommendations

2 DEVELOPING KIM CAPACITY
  2.1 Purpose
  2.2 Processes
     2.2.1 Management
     2.2.2 KI acquisition
     2.2.3 KI creation
     2.2.4 Content management
     2.2.5 KI protection
     2.2.6 KI sharing
     2.2.7 KI utilisation
     2.2.8 Governance
  2.3 Structures
     2.3.1 Organisation structures
        Assessing Intelligent Complex Adaptive Systems (ICAS)
        2.3.1a and other new approaches
        2.3.1b New structures required
        2.3.1c Allocating responsibility in existing structures
     2.3.2 Architectures
  2.4 Resources
     2.4.1 Funding
     2.4.2 Human resources
     2.4.3 Technology
     2.4.4 Knowledge

3 ENSURING SUPPORT FOR KIM
  3.1 Leadership
     3.1.1 Strategic intent
CHAPTER 6: CULTURE AND CHANGE MANAGEMENT

6.1 Change management
In most environments in the public service significant changes will have to occur if KIM is to be fully embraced. Proper change management will be crucial.

Recommendation:
Identify suitable sources of change management support. It can be in the shape of available training, expert consultants (in or outside government) or publications that can be referred to.

6.2 Communication
Apart from being an important change management tool, communication is crucial for making progress with KIM in general.

Recommendation:
Develop a comprehensive KIM communication strategy as a support tool for change management and for promoting KIM in general.

6.3 Culture of enquiry, seeking improvement and innovation
Prerequisites for successful KI creation include employees having the right mindset; enquiring minds, striving for improvement and excellence, etc, accompanied by skills of observation, analysis and communication, that will ensure KI selection, analysis and synthesis needed to generate new knowledge relevant to the organisation’s needs. When dealing with organizational culture in follow-up phases of this project, this issue will be pursued further.

6.4 Research and development Culture
R&D are integral parts of knowledge creation. It is a well-recognised need for all organizations to engage in R&D. This project can add emphasis to this imperative.

Recommendation:
All government institutions should be required to describe their R&D strategies in their strategic plans submitted to National/Provincial Treasury. R&D management should be built into all DG performance assessments.

6.5 KI capturing, organizing, conserving and maintaining Culture

Explicit knowledge

- achieve government-wide integration,
- establish a KIM culture,
• achieve impact,
• provide uses/applications and
• achieve high quality KIM.

The conclusion from the results is that most attention should initially be given to integration and secondly to building a better KIM culture.

6.6 Developing a Government KM Leadership Culture

Recent research confirms the notion that a leader’s style, including the level of emotional intelligence that she demonstrates “can create climates in which information sharing, trust, healthy risk taking and learning flourish”.14 This is the kind of climate needed for KIM.

Recommendation:
In development offerings for senior management and above incorporate KIM leadership training as well as sensitization of the importance of leaders’ emotional intelligence for KIM.

6.7 Entrenching a Domain–Wide KM Culture

This document frequently limits itself to incidental references to topics in the domain of organizational culture and organizational climate, but does not give it sufficiently in-depth attention. More extensive investigation is necessary. Substantial literature on KIM culture is available from sources such as the British Standards Institute15.

Recommendation:
Compile a guideline for ensuring that the appropriate KIM culture is established and maintained in government.

6.8 Establishing Government Structures that Promote the practice of KM

6.8.1 Promoting the Practice of KIM and Assigning responsibility Employees

It is important that in designing their organization structures, public service institutions take into account the need for explicitly assigning responsibility for KIM functions. At this juncture KIM is developing fast and the imperative for more sophisticated KIM is strong. A high level post to head a KIM function is therefore highly desirable in all institutions. The circumstances in different institutions vary widely, therefore a rigid regulation on how KIM should be treated will not be appropriate.

Full cognizance should be taken of existing responsibilities of particular institutions to ensure that new statements of responsibility are in harmony with them.

Recommendation:
A directive should be given to all public service institutions to assign specific responsibility for KIM to an appropriate organizational segment or segments. The directive should cover or at least be in harmony with related directives from the

15 Standards Policy and Strategy Committee of the British Standards Institute, Managing Culture and Knowledge (British Standard PD7501), May 2003, 238 pages.
NARS, DPSA and any others. DPSA should then monitor conformance to this directive.
CHAPTER 7: PUBLIC SERVICES AS A LEARNING ORGANISATION

7.1 A Learning and Knowledge Management Corporate Model

At a planning stage, priorities and mandates determine government’s knowledge needs. Ideally, the mandates and priorities are in turn informed by, amongst others, the public service’s corporate memory, that is, the knowledge in all the documents that came out of discussions and engagements that took place before and at the birth of the democracy. These are important to help the public service understand where it has been and why it has undertaken the current transformation route, importantly to learn from previous interventions and for continuity where necessary. It is of extreme and critical importance to prioritise the coordination of the corporate memory and growing of the knowledge pool of the public service and its institutions.

7.2 Learning in the Public Service

• A learning organisation is characterised by its ability to continually improve performance through new ideas, knowledge and insights. It is able to constantly anticipate, innovate and find new and better ways to fulfill its mission geared towards satisfying the needs of today’s sophisticated citizens, including South Africans, who just expect better service. Therefore, a learning organisation is the one that keeps itself abreast of new development and innovations in the knowledge age.

• A learning organisation is built around people - their knowledge (know-how) and the ability to innovate are at its heart. It thus recognizes the need to move on from the bureaucratic management model inherited from the industrial age and based on predictable tasks, to one better suited to the knowledge age, based on people and skills. Government needs to support innovation, which results from the interventions of a human mind to transform existing information or knowledge into a new asset, a new idea that works.

• Organizational learning is a collective undertaking involving the exchange of knowledge and ideas among people working together in teams and networks. A learning organisation learns from experience and transforms knowledge into know-how.

Through the Integrated Provincial Support Programme, increased shared learning in five provinces was pursued. The IPSP developed models of alternative ways of service delivery, and most of these initiatives and models were widely shared amongst the partner provinces and beyond, and with departments in the whole of the public service. In fact, the IPSP gave impetus to most of the work that has been undertaken to pursue organisational learning and knowledge management. The framework therefore needs to build on that and other initiatives of a similar kind.

7.3 Marketing the concept of learning and knowledge management

Although the concept and practice of learning and knowledge management are generally old, they are new to the majority in the public service. As a result, the Public Service is presently, and has been for a while, stuck in the conceptualisation and defining stages beyond which there seems to be difficulty around practical implementation. Unless officials, and especially senior managers, understand how this intervention is going to benefit and empower them in their work, commitment and buy-in will be compromised. Practical clarity is of utmost importance, hence the need for raising awareness among public officials the organisational value-add of knowledge, in terms of organisational effectiveness and decision and policy making.

7.4 Activities

Marketing should include both a theoretical demystification of knowledge management through "practical demonstrations and illustrations" which are of extreme importance to the understanding of this abstract field. It is thus crucial to prioritise discussions,
demonstrations and workshops that are aimed at demystifying knowledge management and giving it a practical face. The launch of the Learning and Knowledge Management Learning Network in 2003 was a good start towards providing a platform and a structure for such a process, to enable the sharing of practical case studies around knowledge management. The partnership that was developed between the DPSA and the Department of Communications in 2002 went a long way towards introducing and marketing the benefits of knowledge management, countrywide, in a knowledge society and age. Subsequently, a lot of learning networks, cutting across themes and sectors, and the annual service delivery learning academy and the SMS conferences, have escalated the imperative of learning in the public service, and these platforms must be used, especially at provincial levels, to also market the concept and practice of organisational learning and knowledge management.

7.5 Establishing platforms for Sharing and Learning

7.5.1 The following activities promote learning:
- networks,
- communities of practice,
- conferences, etc.)

7.6 Opportunities for Networking and Learning

It is critical to provide opportunities for sharing of experiences, practices, methodologies, etc., through learning networks/communities of practice, conferences and conversations. Learning networks are an ideal facility for public managers to network, engage on issues of common concern, share problems and frustrations and collaboratively explore new methods and ideas for tackling them. To work well these teams need to be recognised and valued by the vertical organization, in this case by government, and without this recognition their ability to add value will be compromised.

Importantly, these networks and horizontal teams flourish in an open environment of trust that encourages debate and recognises the critical importance of relationship building to the success of the organization. Integrated platforms become useful for bringing officials from different sectors together for purposes of interrogating challenges and solutions collaboratively. The Annual South African Service Delivery Learning Academy, for instance, provides public servants with a three-day integrated platform to pursue that ideal. Of great benefit are products that are generated out of these events, which inform academic programmes in terms of relevance. Various sectors also hold sessions in response to their specific needs.

Their strength lies in the fact that learning is a collective undertaking rooted in action. Importantly these platforms are a great facility for generating new knowledge through robust debates and dialogue. The support of learning networks and conferences is thus a key strategic activity in the process of building an adaptive and learning public service and enhancing organisational innovation, along the lines of a learning organisation.

7.8 Learning from within the public service

There is a common phenomenon whereby existing public service knowledge is brokered and sold to public servants. It has become ‘normal’ practice every year for private companies to organise conferences covering public sector themes and topics and importantly using public service officials to provide and present the content to their own colleagues who are charged exorbitant fees for participation.

The following questions should be posed: how do we protect avoid the exploitation of public sector intellectual property by the private sector? Why should public servants pay huge fees to learn from public servants? Admittedly, this is a very complex issue, which
should be handled carefully. It must be noted that private sector companies make their livelihood from these ventures where they utilise public servants to sell public service knowledge to public servants.

7.9 Proposed activities

- The public service should have a ‘virtual’ centre (with a small integrated team from national departments with local and provincial government members) that identifies and coordinates learning needs across the public sector. The centre should then be mandated to collaborate with specific stakeholders (provincial and local government) to develop and coordinate a calendar of learning events and organise conferences and sessions for the different categories, with special focus on integration. The starting point should be those areas that are already being exploited by the private sector on a yearly basis. Alternatively one department should be tasked to coordinate this function.

- Should the private sector organise conferences with public sector focus, the public servants should check with the Centre (provincial representatives) on planned conferences, which will advise them on whether or not their learning needs are going to be addressed in one of the planned events.

- Public servants should not be barred from participating in private sector events that address unique needs not catered for by the public sector. Accordingly, these events and gatherings also offer an opportunity for networking with other counterparts in similar areas of work.

- Where key public servants are allowed to charge private companies or to accept honoraria for contributions, the normal practice of declaring gifts should apply.

7.10 Learning products for documenting, preserving and disseminating knowledge and the intellectual memory of the public service

The question to pose here is: what happens to all the intellectual capital (knowledge) that is generated from learning platforms?

*Case studies & publications (journals, brochures, web pages, etc.) for easy and maximum dissemination of lessons*

As knowledge and learning tools, case studies facilitate access to practical, tried and tested solutions to public service challenges, and facilitate and entrench a culture of learning from our own public service experiences. Importantly they contribute to the body of knowledge developed by the public service for its own development and prosperity. This assumes the existence of writing support, which is critical in knowledge management.

7.11 Activities

7.11.1 Documenting of lessons

Importantly, each sector and/or sphere should prioritise the documenting, archiving and dissemination of lessons (in case studies and other stories) and best practices. Anything and everything that is of importance to the sector should be captured in publications such as, for example the *Service Delivery Review: a Learning Journal for Public Service Managers*. Almost all departments at national level and provinces publications, and these should transformed into learning publications that capture processes and lessons in the implementation of their activities and projects. Communication sections should provide some level of support in this regard.

7.11.2 Providing writing support
A number of ‘creators’ of knowledge in institutions such as project managers in the public service are not writers due to lack of capacity and, largely, time constraints. Also, the culture of writing has suffered a great knock from the popularity of the power point presentation medium. A major challenge is in getting public servants who are sources of knowledge to document valuable experiences. This points to the critical need to provide writing support for purposes of documenting case studies and other articles containing lessons.

7.11.3 Time and space for documenting

Many individuals nearing retirement in the Public Service have a wealth of knowledge and experience. Identifying knowledge nodes (key people) about to retire and granting them appropriate time to go and capture and document what they know for their successor/s is imperative. This suggested activity would have to be in line with the Sabbatical leave policy that has been developed for HODs. Should this be acceptable, a provision should be made for selectively including key officials that are not HODs. Importantly the Sabbatical policy should have clear criteria for appropriate lengths of time for specific categories, ranks and lengths of service. Such individuals should be allowed to progressively step out of their regular duties and use pre-retirement months to document best practices, preserve corporate memory, transfer knowledge within the public service and help prepare those who will take over their responsibilities. This will grow and preserve the institution's pool of knowledge (intellectual capital), ensure continuity and save the successor the stress and trauma of not knowing how far their predecessor took things and thus where to start.

The assumption here is that all such people are seasoned and willing writers, which is not entirely true. Another possible intervention therefore is that special writers should be appointed outside of and within the public service, to sit with the retirees on specific days for identified periods and document their knowledge on their behalf.

7.11.3 Activities

- Time should be invested in identifying key areas in the public sector that require learning interventions and on identifying local institutions and other countries where best practices are located. People should be carefully selected to ensure that they have the competencies to run learning sessions or workshops for public servants on their return, to impart the knowledge they have gathered.

- Partnerships should be sought and forged with local and international institutions for purposes of sharing best practices in various areas within which the public service wants to build expertise.

- Various types of visits or tours should be used for that purpose, the length of the tour or visit determined by the need and type of learning that is required.

- Managers must be allowed to select and send officials working within specific areas to where lessons are identified. They must be allowed the space to form partnerships with counterparts in other institutions and countries and supported with resources to embark on study tours.

- Study tours must not be the preserve of only senior managers, but must be cascaded to all levels as needed, bearing in mind that those that embark on them have the capability to share experiences as required.

- A distinction must be made between learning visits by officials and visits by political principals accompanied by officials because the levels of interface are different. Although they are both equally important for the country, the distinction will ensure that
none clouds the other in terms of critical activities, appropriate time invested in each, etc.

7.12 Develop A Learning, Knowledge Sharing and Creation Programme

7.12.1 Objective
To entrench a learning and knowledge enabling culture and environment by institutionalising a proper department-wide learning and knowledge sharing programme to ensure that officials have all-round understanding of their department’s core mandate and their department’s niche in the national transformation programme.

7.12.2 Activities
• Appoint an official (minimum MMS level) to be responsible for knowledge management
• Develop a list of key learning areas (coordinated by KM component representatives) for the department, in line with its mandate, and schedule learning sessions, workshops, seminars, breakfast sessions, etc. on each to which external and internal experts are invited to make presentations and ignite debate and exchange on issues.
• Proceedings of all learning sessions should be captured/document and published in internal publications e.g. newsletter and posted on the intranet.

7.12.3 Policy imperative
• The internal learning programme should be reflected on the departmental work plan and all key officials who engage with the public service should be tasked with attendance of most sessions.
• This should be incorporated in the departmental and individual developmental plan/s.
• Each department should have a proper induction programme and all new recruits, irrespective of rank, to undergo the programme
• Each department should provide documenting/writing resources (human and equipment). The communications sections must be roped in to provide support in this regard

7.13 Skills
Valuable skills development opportunities are already available, presented by the DComs, DPSA, and tertiary education institutions. Utilisation of these opportunities should be encouraged. The expanded KIM activities visualized when a KIM strategy is fully implemented, will probably generate a need for more extensive HR development opportunities. It will be premature at this stage to undertake a comprehensive training needs analysis. Work on some of the other recommendations need to make some progress first in order to lay the basis for such an analysis. In the interim full support for existing opportunities would be appropriate.

Recommendation:
1. Existing KIM training/development opportunities must be utilized to the full. Providers and users must undertake to collaborate on incremental development of offerings to keep pace with government’s increased
understanding of its needs.

2. When implementation of expanded KIM strategies have progressed sufficiently, training needs should be reviewed by analyzing required job performance, deducing training objectives, training content and other characteristics from them, so that training development can follow.

We must guard against impeded KIM caused by a knowledge divide within the public service. It is imperative that employees are sufficiently skilled to share in KI that affect them. It is not deemed necessary to discuss here the need to provide IT infrastructure to all employees, but IT skills development does justify our attention.

Skills requirements are diverse, depending amongst others on the discipline(s) in which individuals work and their location in the KI value chain. Skills development requirements can be divided into three categories:

1. Generic IT skills
2. Generic skills for knowledge processing*
3. Discipline-specific knowledge processing*
   * Across the whole value chain.

Generic IT skills needs go further than the scope of KIM. Training is available, but it needs to be ensured that it is properly managed and utilized. Skills development is a universal challenge that the GITOC should attend to in a wider perspective.

Recommendation:

1. The GITO Council launch a project to investigate generic IT skills development in government to address the widespread need for enhanced ICT and KIM skills, among IT professionals as well as among employees in general.
2. Nominate a suitable entity to compile specifications for generic knowledge processing skills development and to propose action to be taken to develop and implement the development processes.

The need to develop discipline-specific knowledge processing skills can best be investigated by the same parties that take responsibility for forming communities of practice (see Section 0 and elsewhere).

CHAPTER 8: INFRASTRUCTURE AND INFOSTRUCTURE

8.1 Relationship between Knowledge Management and IT and the role of IT in KM

Knowledge management is not information technology but IT is a great enabler of KM. If harnessed accordingly IT will provide access to information and help scale KM efforts to enhance decision making, build bridges between pockets of knowledge, identify new pockets and nodes of knowledge, leverage knowledge already created, etc. KM is about managing what people know and establishing best methods of leveraging that knowledge, convincing people to share knowledge, mapping what people know to a business process and filling knowledge gaps, capturing and codifying unique knowledge to prevent its loss, helping people know who to turn to when they need to fill a knowledge gap, capturing and advocating lessons learned and best practices, valuing unique and proprietary corporate knowledge and importantly, institutionalising successful knowledge processes.
8.2 Developments that will shape the organisation of the future\(^\text{16}\)

8.2.1 Technology

Forces that are likely to have a major impact on the way future organisations will operate relate to enhanced connectivity, processing power and speed and storage capacity. This will lead to increases in the speed and volume of capturing, transmitting, accessing, and processing data, information and knowledge. This will cause an increase in the complexity of business processes and the organization. Connectivity, speed and large amounts of information from everywhere on earth will seed the culture of the future. How understanding of the above characteristics can be enhanced and shared, to facilitate knowledge application for the good of the organization needs to be resolved.

8.2.2 The Main Infrastructure of the Next Generation Knowledge-based Public Service.

Made available by increased bandwidth and processing power of both silicon and biotechnology, they offer the opportunity for virtual information and knowledge support systems that connect data, information, knowledge and people through virtual communities, knowledge repositories and knowledge portals. The foundation and grounding of these future institutions will be strengthened through a common set of strong, stable values held by all employees.

8.3 Development of web pages and sites

Institutions should maximise intranets and other web sites and pages as knowledge sharing tools. Of importance is continuous updating of these sites. Web sites and pages provide a platform for quick access to requests and importantly to allow officials to network and exchange ideas and information freely with one another.

8.4 Government institutions’ evolution towards Intelligent Complex Adaptive Systems (ICASs)

The expected global advent of ICAS discussed in Section Error! Reference source not found. is considered a significant development of which the KIM strategy should take cognizance. The extent to which ICASs emerge in government can have a strong influence on KIM strategies.

**Recommendation:**

The DPSA should be requested to submit their views on the promoting of ICASs in government and should be engaged on the interaction between such an initiative and the development of KIM strategies.

SITA’s proposed IDMS strategy has not been received. It was understood that part of this strategy would indicate the nature of support that SITA would offer to its clients in this regard.

**Recommendation:**

1. SITA should distribute a draft of their proposed IDMS strategy at their earliest convenience for input by their clients, notably the KIM Work Group.
2. Establish an IDMS community of practice which institutions operating, or implementing such systems can join.

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16 For a full description of how these forces are expected to reshape organizations, see Bennet A and Bennet D, Characterizing the Next Generation Knowledge Organization, Knowledge and Innovation: Journal of the KMCI Volume 1, no.1, October 15, 2000 (© 2000 Knowledge Management Consortium International, inc).
8.5 KI needs determination for Acquisition of KM Systems

8.5.1 Needs determination

8.6 Sequence of steps for KI needs determination

- Organisational goals
- Strategies
- Business operations
- KIM needs
- Research strategy

The methodology used by SITA for compiling master information system plans for departments follows a logic that closely resembles the above. It should be possible to expand the Information Technology Planning Guidelines to serve the broader purpose of KIM Planning Guidelines.

**Recommendation:**

Review the existing Information Technology Planning Guidelines used by SITA with a view to transforming them into KIM Planning Guidelines (of which IT will be a component).

8.7 Supporting policy imperative

- In every department, monitoring tools must be developed to track activities. Examples of tools include the following:
  - A tracking system in terms of dissemination of information or usage of knowledge.
  - Web based system (depending on the level of advancement of the organisation).
- Benchmarking must be used as a means to gauge and assess the extent to which the department is doing, relative to similar departments or organisations, and seek to consolidate where it is doing well, and improve where there is an identified need.
- Project review reports must form part of the activities of project managers and senior managers, showing how projects and activities have been implemented, lesson learnt, and steps to take stock of those lessons thereof.

8.8 Data mining and data warehousing

The wide range of software that is available presents a challenge to any institution setting out to acquire appropriate software and developing systems. Some of these have been developed for specific environments and may not necessarily be the most suitable for all uses. An example is software developed to build up patient histories by accessing different databases owned and maintained by different institutions in the health sector.

Exploitation of the potential of the relevant techniques will currently be best served by building government’s technical expertise, developing and implementing systems that can serve as prototypes and setting up a COP or other knowledge sharing structure.

**Recommendation:**

1. Establish expertise on available technology (hard- and software) in order to provide advice to builders of new systems.
2. Investigate possible candidate sites to be designated centres of excellence from whose achievements other potential users can benefit.
3. Create a Community of Practice for stakeholders in these kind of systems.

8.9 Narrative databases
Narrative databases are built by collecting stories in organisations, perceived to be giving much richer sources of information. Then stories about stories are collected. From that archetypes of behaviour is identified, helping to understand organisational culture, organisational behaviour, competencies etc. The patterns that emerge can then be managed.\(^{17}\)

**Recommendation:**

An appropriate government institution is to familiarize itself with this technique and provide guidance to institutions such as departments or communities of practice wishing to apply it.

### 8.10 Environmental scanning

A well-recognized instrument for business intelligence is to scan the environment in various ways, such as by studying news media and other literature (including “grey” literature), attending conferences, attending exhibitions, Internet surfing, and discussions with key functionaries (in the business world sometimes even under false pretences). This can be a useful method for government departments.

There are more than one process in place to collect and circulate newspaper clippings reflecting coverage pertaining to the relevant institution. The systematic sifting through the material that is gathered requires some effort however and appears to be neglected in some cases.

**Recommendation:**

Investigate the need for assistance with environmental scanning in the public service. Then consider appropriate action to help meet the need.

### 8.11 Technology

SITA’s mandate to provide leadership in the utilization of technology is well established. The GITOC has previously identified the need to be briefed more systematically and comprehensively on ICT trends. A process to brief GITOC can serve to give briefings on ICT as specifically relevant to KIM at the same time.

There is expected to be a continuous need for implementing new technology on an experimental basis and taking it through piloting to prototype systems. Existing structures, especially SITA and the CPSI are deemed to adequate to meet this need.

**Recommendation:**

1. Develop a procedure for briefings to GITOC and the government IT community in general on trends and developments that affect IT in general, including KIM.

    Utilise SITA and the CPSI to promote innovation in the form of piloting and prototyping

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17 Anon, David Snowden – Director of the Cynefin Centre for Organisational Complexity, IBM Global Services, [http://www.som.cranfield.ac.uk/som/cbp/020409%20David%20Snowden.doc](http://www.som.cranfield.ac.uk/som/cbp/020409%20David%20Snowden.doc) no further details
9.2 Checklist for indicators that may be needed

Indicators must enable –

- comparison of –
  - actual performance with objectives
  - actual performance with benchmarks
  - own performance with performance of other comparable entities
  - own performance now with own performance in the past
  - relative performance of the different subsections of the entity.

- assessment of –
  - technical excellence of operations
  - professionalism of management and administration
  - customer/ user satisfaction with the outcomes of the strategy
  - satisfaction of principals or owners with the entity’s performance.

- measurement of KIM processes i.t.o. quantity and quality of -
  - inputs
    - potential input
    - actual input
  - processes
    - operational processes
    - management and support processes
  - outputs
  - outcomes

9.3 Temporal aspect

Selected indicators can be a mix of -
- leading indicators
- concurrent indicators
- lagging indicators.

9.4 Blending qualitative and quantitative information

Indicators can be a blend of quantitative and qualitative information, with qualitative information including amongst others results of opinion surveys.

9.5 Utilising primary and secondary sources

Information to compile indicators can emanate from secondary use of existing information sources that were established for other purposes, or from primary sources such as surveys undertaken specifically for KIM performance assessment.

9.6 Surrogate indicators

Where it is not feasible to use a specific indicator because the necessary data cannot be obtained, surrogate indicators are often of use, e.g. when the date of birth of a horse is not known, its age is estimated by looking at the state of its teeth.

9.7 Using sample surveys where appropriate

Information gathering exercises can either aim for full coverage of or for representative samples.
9.10 Way forward

9.10.1 Pilot survey
Internationally significant progress has been made with KIM surveys that assess the status of KIM in organizations. The survey for public service entities developed and implemented by the Organisation for Economic Cooperation and Development (OECD) stands out as one that can be a valuable basis for a similar survey in South Africa.

Recommendation:
That a pilot survey based on the OECD survey be conducted in selected public service entities in South Africa.

9.11 Development required
Recommendation:
Develop a proposed a set of indicators, systems to gather the information needed to compile such indicators, and procedures to analyse the indicators and report on the findings. See also Recommendation 3 at Section 0.

Recommendation:
Initiate a further phase of this investigation to examine KIM involving non-government sectors.

The NEPAD dimension
In conformance with the NEPAD philosophy, this strategy must, where feasible, be extended to any other African country that expresses an interest.

CHAPTER 10: LEGAL FRAMEWORK

10.1 Enabling Legislation
The framework is built and anchored on the following pieces of legislation:

- National Archives of South Africa Act No. 43 of 1996 promotes accessibility of national public and non-public records and use of such by the South African public for the betterment of the country (although the restrictions and prescriptions under this act do not apply in the area of knowledge management as intended in the framework.
- Promotion of Access to Information Act no. 2 2000
- Promotion of Administrative Justice Act no. 3 of 2000
- White Paper on Transforming the Public Service
- White Paper on Human Resources Development in the Public Service

10.2 Legislation and Regulation
Till now no entirely new legislation or regulation has been considered for KIM. Directives on records and record keeping issued by the National Archives and Records Service can be given legal standing under the National Archives Act. They have compiled electronic records management policies and a Content Management Task Team of the KIM Work Group is in the process of reviewing them.

10.3 Governance
The ways in which governance of an institution or a process can be effected include –
- legislation, regulations and other formally documented directives;
- standards to which processes and outputs must conform;
- priority goals and actions to be pursued;
- an overarching, wider strategy which must be conformed with;
- a governing body consisting of people with the desired personal standpoints, briefed on desired behaviour of the institution/ process, directed to steer the activities in the desired direction; and
• withholding funding from actors who do not perform in the desired fashion.
Each of these instruments is discussed briefly below.

12. CHAPTER 11: IMPLEMENTATION PLAN

11.1 Implementation

At the implementation stage, line departments and components/units within those
departments generate operational work and business plans through their strategic
planning sessions and performance agreements. It is at this level and stage that broad
learning and knowledge needs are further teased out into specific ones, in line with
specific line functions. Since it is at the implementation stage, closer to service delivery,
that most challenges are experienced, this is where access to knowledge becomes critical.
This knowledge is contained in case studies, articles, project reports and a variety of
sources that contain best practices, lessons for replications, etc.

11.2 Reviewing and reflection

Platforms for sharing of experiences and lessons and for reflection on implementation
(knowledge) become crucial, such as conferences, learning sessions, site visits,
exchanges, etc., are crucial. What comes out of these engagements and discussions
should be documented and added to the growing pool of public service knowledge.

11.3 Improved implementation

The information and knowledge that is gathered during the planning stage, as well as the
new innovative knowledge that is created through implementation and through reflection,
should ideally lead to improved implementation. This improved implementation would then
be as a result of lessons learned, tried and tested solutions and methodologies for
adapting in specific and unique environments and dynamics. This is a cyclic process
with lots of movement to and from the knowledge pool (in libraries, web pages,
conferences, workshops, etc.), the next round of strategic planning, work plan
development and implementation should ideally be improved.
To facilitate the process of retaining institutional knowledge which officials take with them when they leave institutions.

Activities

Departments should create an open environment for officials to make known their intentions to leave early enough to allow the capturing of key knowledge from them before their departure.

Communities of purpose have a shorter time horizon and are accountable for delivering a specific business goal. These could include project teams, steering groups and task forces.\textsuperscript{18}

These forms of knowledge sharing should be encouraged in government. Some forums that already exist can be transformed or supplemented to establish communities of practice, e.g. the Communication Forum coordinated by the GCIS and some of the GITOC work groups and standing committees.

Recommendation:

1. Compile guidelines for the establishment and management of COPs and similar bodies.
2. Devise a strategy for publicizing their application and benefits.
3. Promote the establishment of such groups for disciplines cutting across many government departments. Assign responsibility to a government department for each of the following COPs:
   - Human resources management
   - Financial management
   - Supply chain management
   - Legal services
   - Communication
   - Security
   - Information technology
   - IDMS

11.4 Narrative databases

This is another valuable aid, built on the practice of storytelling as a KIM tool, for capturing and sharing KI. Quotes a description of how they work.

Recommendation:

1. Compile a guideline for developing narrative databases.
2. Recommend to all COPs that they should promote the use of such databases.
3. Include guidelines for managing such databases in the Content Management Work Group’s brief. Assign responsibility to a suitable centrally placed institution to keep a record of all such databases, to assist with their...

\textsuperscript{18} Allan N, Van Leeuwen M; European Guide to Good Practice in Knowledge Management, working draft 5; CEN/ISSS, 2003.
administration and to ensure accessibility to them for all who may benefit from them.

11.5 Informal communities

“Informal communities, which may range from public to secret in their profile, provide a rich and fertile source of knowledge and learning that is too large and complex to be formally managed. One study of actual practice in IBM Global Services indicated some 50-60 official areas, complimented by many tens of thousands of private areas. By providing spaces in which members of the organization could naturally share with people they trust, a fertile source of learning was created.”

Recommendation:
1. The role of informal communities should be stressed in KIM training.
2. Include assessment of the opportunities that exist for the development of informal communities in organizational performance assessment.

11.6 Formalising KI sharing arrangements

In specific circumstances it is advisable to create extensively formalized KI sharing arrangements. The National Land Information System is an example of such a situation in the South African Government. It is important to note that the establishment of such organizations can be quite complex.

Situations also arise where the South African government needs to enter into information sharing agreements with other governments. A recent example is South Africa’s decision to join the Global Biodiversity Information Facility. A proper understanding of obligations and benefits and other implications is necessary before finalizing any arrangements.

Checklist of matters to be considered when developing inter-institutional KI sharing agreements. It was compiled after study of the Spatial Information Act and the documentation applicable to members of GBIF.

Recommendation:
1. The checklist is to be made available on appropriate websites for use by parties that need to forge complex data sharing agreements.
2. The checklist be supplemented with more extensive explanatory notes.

11.7 Multilingualism

The principle of multilingualism is set out in the Constitution and should be accommodated in any KI sharing strategy. The language policy unveiled by the Minister of Arts, Culture, Science and Technology in 2003 provides for all government documents to be translated into at least six official languages on a rotational basis.

Elsewhere in the world, e.g. in the European Union where several official languages are used, expertise in multilingualism has been developed. The need for increased international cooperation is vital if South Africa is to deal successfully with the enormous challenges it faces in respect of language. Some of the official languages have never been used in certain domains and need to be enhanced and modernised. Language awareness has to be created, resources established, the capacity of language workers developed through academic programmes and the status of the language professions elevated. The Department of Arts and Culture is attending to these matters. Human Language Technology (HLT) is an integral part of their strategy. It is envisaged that as HLT is acquired, opportunities will be created for language practitioners across government to share in its use.

20 See www.gbif.net
Recommendation:
GITOC to be briefed on HLT strategies as incorporated in the National Language Policy.

KIM will furthermore be enhanced if each government employee masters additional official languages. The opportunities and incentives for doing so should be increased.

Recommendation:
Request the responsible authorities to investigate strategies to promote increased multilingualism among government employees.

11.8 KI utilization

11.8.1 Utilising Just-in-time (JIT) KIM
This approach can yield practical benefit from KIM while also helping to avoid some of the pitfalls that could result from ill-considered implementation strategies. The main features of JIT KIM as described by Snowden21 are as follows:

- Ensure a diversity of approach
- Don’t impact on people’s time
- Connect people, build networks
- Social network stimulation (SNS) (see ANNEXURE D)
- See where people walk before you build paths
- Build narrative databases.

Recommendation
1. The principles of JIT KIM are adopted as a guideline.
2. Exposition of these principles to be made available to potential users in the form of literature or training.

The Work Group submit revised ERM guidelines and policy to the GITOC for concurrence, after which the National Archives can issue them as a binding document in terms of their Act.

11.9 KIM standards

Technical Committees of Standards South Africa are working towards national standards for knowledge management and for “Information and Documentation”.

11.10 Governance and Coordination

Recommendation:
1. The KIM Work Group maintains its current participation in the work of the relevant STANSA Technical Committees.
2. When national standards are finalized, GITOC, supported by the KIM WG advise on the adoption of such standards for use within government.

Setting goals and priorities

Recommendation:
The GITO Council should on an indefinite basis advise on goals and priorities for the KIM function in government. The exact mechanics of doing so should be determined annually based on the structures and procedures that are in place, amongst others as part of the Medium Term Expenditure framework.

Note: This recommendation does not preclude advice from other quarters as well.

11.9.1 Governance by an overarching strategy

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21 Snowden DJ, The knowledge you need right when you need it, KM Review Volume 5 Issue 6, January/February 2003.
GITOC has assumed the role of developing a strategy for KIM in government, to be submitted to the Minister for Public Service and Administration for consideration. Should it meet with her approval, it will meet the governance need.

**KIM governing body: Not feasible**

KIM is too diffused and intermingled with other activities to be directed by a specific body that has authority over all major KIM functions. The best that can be achieved is a monitoring function which can generate reports and recommendations for action that can be submitted to any number of government functionaries that are authorized to act. It can be accommodated in the activities proposed in Section Error! Reference source not found. (“Error! Reference source not found.”).

**11.9.2 Funding as a governing instrument**

Penalising unsatisfactory performance by reducing funding should only be a measure of last resort. It must be assumed that the underperforming entity was established to meet a recognized need. Rather than penalizing it for underperformance, it should be assisted to improve its performance, so that the need can be met.

**K1 funding**

The KIM function is important enough for funding allocated to it to be made visible and ultimately to be the subject of conscious decision-making. Present accounting systems do not fully allow it.

**Recommendation:**
1. Set active management of expenditure on KIM in the public service as a goal.
2. Engage National Treasury on adapting cost allocation frameworks to give more visibility to KIM-related expenditure.
3. For expenditure on aspects of KIM that cannot be extracted from financial records, consider surrogate indicators, see Section 0.
4. Develop a monitoring process to ensure sufficient availability of KIM funding information to allow proper management and control of such funding and expenditure.

**Recommendation:**
Parties tasked to investigate the establishment of COPs (Section 0 and elsewhere) should also investigate training strategies for that discipline, either through the COP or through other methods.

The skills required for knowledge utilization are intimately interwoven with other skills needed by knowledge workers, as well as with general life skills. It is not feasible for GITOC to get involved in developing this category of skills. What is important is to underline the fact that responsibility for skills development lies in the first place with the individual herself. The employer and government are obliged to assist, but the individual has to take primary responsibility, not only regarding KIM skills, but all others as well.

The creation of learning organizations is an integral part of management’s responsibility and should be encouraged.

**Recommendation:**
Ensure that guidance on creating learning organisations, in the form of training or otherwise, is available for managers in the public service.

2. 

**Recommendation:**
Consider strategies for Africa-wide involvement concerning social networks and narrative databases, as well as utilization of the KIM website.
11.10 Conclusion

KIM is a wide-ranging activity. The resources to promote KIM in government is not adequate. For KIM WG members it is a part-time activity over and above their normal full time jobs. Coordinating the wide-ranging recommendations in this proposed strategy will require considerable effort.

Recommendation:
The OGCIO should create capacity to support the KIM Work Group in following through on the current recommendations as well as those that will follow, until a fully developed KIM strategy is in place.

It is envisaged that the WG will carry an important responsibility for a number of years. Its monitoring function is likely to be a long term responsibility. This is inconsistent with the philosophy that Work Groups should have a limited, finite lifespan and disband after having complied with the specifications in its charter. It will have to play a consolidating and integrating role over a long period.

Recommendation:
Convert the KIM Work Group into a KIM Standing Committee.

Next steps
Recommendation:
1. Subject to GITOC acceptance of the recommendations in this report, the WG liaise with the parties responsible for taking action to compile action plans.
2. Monitor the execution of above action plans.
3. Compile an interim report to the Minister of Public Service and Administration.
4. Compile action plans for the WG to address outstanding issues raised in this report.
### CHAPTER 12 RECOMMENDATIONS

#### Follow-up actions

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<td>1</td>
<td>DEMONSTRATING KIM’s VALUE</td>
<td>Target a service delivery area that is a high priority for government and</td>
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<td>Needs &amp; opportunities</td>
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<td>3</td>
<td>In the public sector</td>
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<td>National &amp; provincial</td>
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<td>Local government</td>
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<td>6</td>
<td>Other public entities</td>
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<td>7</td>
<td>Wider than the public service</td>
<td>Initiate a further phase of this investigation to examine KIM involving non-government sectors.</td>
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<td>8</td>
<td>Business</td>
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<td>9</td>
<td>Private citizens</td>
<td>Consider strategies for Africa-wide involvement concerning social networks and narrative databases, as well as utilization of the KIM website.</td>
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<td>10</td>
<td>Other countries</td>
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<tr>
<td>11</td>
<td>Track record</td>
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<tr>
<td>12</td>
<td>Measurement</td>
<td>Develop a proposed a set of indicators, systems to gather the information needed to compile such indicators, and procedures to analyse the indicators and report on the findings.</td>
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**Note:** The available literature on KIM indicators needs to be studied and a proposed list of indicators and an
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<td>13</td>
<td>accompanying information gathering system designed. Estimated cost R200 000.</td>
<td>7.7.2a Find funding.</td>
<td>HSRC/</td>
</tr>
<tr>
<td></td>
<td>That a pilot survey based on the OECD survey be conducted in selected public service entities in South Africa.</td>
<td></td>
<td>SITA</td>
</tr>
<tr>
<td>14</td>
<td>1.3.1 KIM practices</td>
<td></td>
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<tr>
<td>15</td>
<td>1.3.1a Proficiency</td>
<td></td>
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<tr>
<td>16</td>
<td>1.3.1b Attitude, perceptions</td>
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<td>17</td>
<td>1.3.1c Coverage</td>
<td></td>
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<td>18</td>
<td>1.3.1d Track record (outputs, outcomes)</td>
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<td>19</td>
<td>1.3.2 Effectiveness of KIM training</td>
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<tr>
<td>20</td>
<td>1.3.3 Extent of implementation of WG recommendations</td>
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<tr>
<td>21</td>
<td>2 DEVELOPING KIM CAPACITY</td>
<td></td>
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<tr>
<td>22</td>
<td>2.1 Purpose</td>
<td></td>
<td>Deal with this WG under 3.1</td>
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<td>23</td>
<td>2.2 Processes</td>
<td></td>
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<tr>
<td>24</td>
<td>2.2.1 Management</td>
<td></td>
<td>7.5.2a Approach SITA. SITA</td>
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<tr>
<td></td>
<td>Review the existing Information Technology Planning Guidelines used by SITA with a view to transforming them into KIM Planning Guidelines (of which IT will be a component).</td>
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<tr>
<td>25</td>
<td>2.2.2 KI acquisition</td>
<td></td>
<td>7.5.2b Investigate WG COBIT</td>
</tr>
<tr>
<td></td>
<td>All government institutions should be required to have Internet policies in place that not only enforce discipline through rules and regulations, but also encourages responsible</td>
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<tr>
<td>Item</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
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<tr>
<td>26</td>
<td>A draft guideline that all institutions can use as a basis for compiling internet policies should be made available.</td>
<td>7.5.2b</td>
<td>Approach State Attorney to release available document.</td>
</tr>
<tr>
<td>27</td>
<td>KIM leadership training should include guidance on creation of a suitable climate for acquiring new KI.</td>
<td>7.5.2b</td>
<td>Refer to SAMDI.</td>
</tr>
<tr>
<td>28</td>
<td>All government institutions should be required to describe their R&amp;D strategies in their strategic plans submitted to National/Provincial Treasury.</td>
<td>7.5.2c</td>
<td>Discuss with Treasury.</td>
</tr>
<tr>
<td>29</td>
<td>R&amp;D management should be built into all DG performance assessments.</td>
<td>7.5.2c</td>
<td>Discuss with DPSA.</td>
</tr>
<tr>
<td>30</td>
<td>The KIM WG submit proposed RM policies and guidelines for government to the GITO Council for acceptance when they are ready. The recommendations should cover paper as well as electronic records and other facets of content management.</td>
<td>7.5.3a</td>
<td>Refer to Content Management Task Team.</td>
</tr>
<tr>
<td>31</td>
<td>The National Library’s progress with developing processes for regulating electronic publications be monitored.</td>
<td>7.5.3a</td>
<td>DAC requested to give feedback.</td>
</tr>
<tr>
<td>32</td>
<td>SITA should distribute a draft of their proposed IDMS strategy at their earliest convenience for input by their clients, notably the KIM Work Group.</td>
<td>7.5.3a</td>
<td>Approach SITA.</td>
</tr>
</tbody>
</table>

*Note: A thorough guideline on the use of IDMS and related issues needs to be drafted. The various approaches used by various vendors, as well as government departments who have already started*
<table>
<thead>
<tr>
<th>Item</th>
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<th>Possible project leader</th>
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<tr>
<td>33</td>
<td>FRAMEWORK</td>
<td>Implementing, should be analysed. (R50 000) Establish an IDMS community of practice which institutions operating, or implementing such systems can join.</td>
<td>7.5.3a</td>
<td>Refer to Content Management Task Team.</td>
<td>CM TT</td>
</tr>
<tr>
<td>34</td>
<td>2.2.5 KI protection</td>
<td>Establish an IDMS community of practice which institutions operating, or implementing such systems can join.</td>
<td>7.5.3b</td>
<td>Publicise this in the Communication Strategy.</td>
<td>GCIS</td>
</tr>
<tr>
<td>35</td>
<td>2.2.6 KI sharing</td>
<td>Government recognizes the use of alternative media such as audio and video recordings as legitimate instruments for visit reports.</td>
<td>7.5.3b</td>
<td>Publicise this in the Communication Strategy.</td>
<td>GCIS</td>
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<tr>
<td>36</td>
<td>FRAMEWORK</td>
<td>The Content Management Task Team in collaboration with the G2G project team (Section 7.5.5.b) draft guidelines for organizing records in all media in a way that ensures that they can be made widely accessible, across institutions in government.</td>
<td>7.5.3b</td>
<td>Refer to Content Management Task Team.</td>
<td>CM TT</td>
</tr>
<tr>
<td>37</td>
<td>FRAMEWORK</td>
<td>Guidance should be sought from SITA on better utilization of the full spectrum of collaboration tools available.</td>
<td>7.5.3b</td>
<td>Approach SITA.</td>
<td>SITA</td>
</tr>
<tr>
<td>38</td>
<td>FRAMEWORK</td>
<td>The DPSA and CPSI should pursue the development of a pilot G2G portal as they propose</td>
<td>7.5.5a</td>
<td>CPSI to keep the WG informed on progress.</td>
<td>CPSI</td>
</tr>
<tr>
<td>39</td>
<td>FRAMEWORK</td>
<td>Compile guidelines for the establishment and management of COPs and similar bodies.</td>
<td>7.5.5c</td>
<td>Approach DPSA Learning &amp; KM Network.</td>
<td>DPSA</td>
</tr>
<tr>
<td>40</td>
<td>FRAMEWORK</td>
<td>Devise a strategy for publicizing COP's application and benefits.</td>
<td>7.5.5d</td>
<td>Publicise this in the Communication Strategy.</td>
<td>DPSA, GCIS</td>
</tr>
</tbody>
</table>

_**Note:** This could become part of an on-going scan of IT developments and subsequent guidelines compiled by SITA for users who should replace or add to systems and software used for collaboration. (R40 000 per annum)_
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<td>41</td>
<td>Promote the establishment of such groups for disciplines cutting across many government departments. Assign responsibility to a government department for each of the following COPs:</td>
<td>7.5.5d</td>
<td>DPSA</td>
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<td>Supply chain management</td>
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<td>Treasury</td>
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<td>Legal services</td>
<td>7.5.5d</td>
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<td>Communication</td>
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<td>49</td>
<td>IDMS</td>
<td>7.5.5d</td>
<td>NARS</td>
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<td>50</td>
<td>Compile a guideline for developing narrative databases.</td>
<td>7.5.5d</td>
<td>DPSA</td>
</tr>
<tr>
<td>51</td>
<td>Recommend to all COPs that they should promote the use of such databases.</td>
<td>7.5.5d</td>
<td>DPSA</td>
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<tr>
<td>52</td>
<td>Include guidelines for managing such databases in the Content Management Work Group’s brief. Assign responsibility to a suitable centrally placed institution to keep a record of all such databases, to assist with their administration and to ensure accessibility to them for all who may benefit from them.</td>
<td>7.5.5d</td>
<td>CM TT</td>
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<td>Item</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
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<td>53</td>
<td></td>
<td>The role of informal communities should be stressed in KIM training.</td>
<td>7.5.5e</td>
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<td>54</td>
<td></td>
<td>The checklist at ANNEXURE C is to be made available on appropriate websites for use by parties that need to forge complex data sharing agreements.</td>
<td>7.5.5f</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>The checklist be supplemented with more extensive explanatory notes.</td>
<td>7.5.5f</td>
</tr>
<tr>
<td>56</td>
<td></td>
<td>GITOC to be briefed on HLT strategies as incorporated in the National Language Policy.</td>
<td>7.5.5g</td>
</tr>
<tr>
<td>57</td>
<td></td>
<td>Request the responsible authorities to investigate strategies to promote increased multilingualism among government employees.</td>
<td>7.5.5g</td>
</tr>
<tr>
<td>58</td>
<td>2.2.7 KI utilisation</td>
<td>Establish expertise on available data mining and data warehousing technology (hard- and software) in order to provide advice to builders of new systems.</td>
<td>7.5.6ai</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This could be combined with other technology scanning exercises and add say R20 000 expenditure per year.</td>
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<tr>
<td>59</td>
<td></td>
<td>Investigate possible candidate sites to be designated centres of excellence from whose achievements other potential users can benefit.</td>
<td>7.5.6ai</td>
</tr>
<tr>
<td>60</td>
<td></td>
<td>Create a Community of Practice for stakeholders in these kind of systems (Business Intelligence)</td>
<td>7.5.6ai</td>
</tr>
<tr>
<td>61</td>
<td></td>
<td>An appropriate government institution is to familiarize itself with business intelligence techniques and provide guidance to</td>
<td>7.5.6aii</td>
</tr>
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<td>Item</td>
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<td>62</td>
<td></td>
<td>Preliminary research could be done for R10 000 and a more detailed strategy then developed.</td>
<td>7.5.6a</td>
</tr>
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<td></td>
<td></td>
<td>Investigate the need for assistance with environmental scanning in the public service. Then consider appropriate action to help meet the need.</td>
<td>7.5.6a</td>
</tr>
<tr>
<td>63</td>
<td></td>
<td>The principles of JIT KIM are adopted as a guideline.</td>
<td>7.5.6b</td>
</tr>
<tr>
<td>64</td>
<td></td>
<td>Exposition of these principles to be made available to potential users in the form of literature or training.</td>
<td>7.5.6b</td>
</tr>
<tr>
<td>65</td>
<td>2.2.8 Governance</td>
<td>The Work Group submit revised ERM guidelines and policy to the GITOC for concurrence, after which the National Archives can issue them as a binding document in terms of their Act.</td>
<td>7.5.7a</td>
</tr>
<tr>
<td>66</td>
<td></td>
<td>The KIM Work Group maintains its current participation in the work of the relevant STANSA Technical Committees.</td>
<td>7.5.7a</td>
</tr>
<tr>
<td>67</td>
<td></td>
<td>When national standards are finalized, GITOC, supported by the KIM WG advise on the adoption of such standards for use within government.</td>
<td>7.5.7a</td>
</tr>
<tr>
<td>68</td>
<td>2.3 Structures</td>
<td></td>
<td>7.5.7aii</td>
</tr>
<tr>
<td>69</td>
<td>2.3.1 Organisation structures</td>
<td></td>
<td>7.5.7aii</td>
</tr>
<tr>
<td>Item</td>
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<td>RECOMMENDATIONS</td>
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<tr>
<td>70</td>
<td>2.3.1a</td>
<td>Assessing Intelligent Complex Adaptive Systems (ICAS) and other new approaches</td>
<td>7.4.4</td>
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<tr>
<td></td>
<td></td>
<td>The DPSA should be requested to submit their views on the promoting of ICASs in government and should be engaged on the interaction between such an initiative and the development of KIM strategies.</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>2.3.1b</td>
<td>New structures required</td>
<td>7.4.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Office of the GCIO establish a segment with a mission of coordinating and promoting KIM in government.</td>
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<tr>
<td>72</td>
<td></td>
<td>Convert the KIM Work Group into a KIM Standing Committee.</td>
<td>10</td>
</tr>
<tr>
<td>73</td>
<td>2.3.1c</td>
<td>Allocating responsibility in existing structures</td>
<td>7.4.2</td>
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<tr>
<td></td>
<td></td>
<td>Document the role of each institution, obtain management approval and communicate it properly to the KIM community.</td>
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<td>74</td>
<td></td>
<td>A directive should be given to all public service institutions to assign specific responsibility for KIM to an appropriate organizational segment or segments. The directive should cover or at least be in harmony with related directives from the NARS, DPSA and any others. DPSA should then monitor conformance to this directive.</td>
<td>7.4.3</td>
</tr>
<tr>
<td>75</td>
<td>2.3.2</td>
<td>Architectures</td>
<td>Not all SITA architecture issues fall under &quot;Structures&quot;. Proper unpacking of enterprise architecture, information architecture, technology</td>
</tr>
<tr>
<td>Item</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
<td>PROPOSED FOLLOW-UP</td>
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<tr>
<td>76</td>
<td>2.4</td>
<td>Resources</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The OGCIO should create capacity to support the KIM Work Group in following through on the current recommendations as well as those that will follow, until a fully developed KIM strategy is in place.</td>
<td>OGCIO.</td>
</tr>
<tr>
<td>77</td>
<td>2.4.1</td>
<td>Funding</td>
<td>7.6.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set active management of expenditure on KIM in the public service as a goal.</td>
<td>Treasury</td>
</tr>
<tr>
<td>78</td>
<td></td>
<td>Engagement National Treasury on adapting cost allocation frameworks to give more visibility to KIM-related expenditure.</td>
<td>National Treasury</td>
</tr>
<tr>
<td>79</td>
<td></td>
<td>For expenditure on aspects of KIM that cannot be extracted from financial records, consider surrogate indicators, see Section 7.7.1.</td>
<td>Incorporate under &quot;Measures&quot;.</td>
</tr>
<tr>
<td>80</td>
<td></td>
<td>Develop a monitoring process to ensure sufficient availability of KIM funding information to allow proper management and control of such funding and expenditure.</td>
<td>Incorporate under &quot;Measures&quot;.</td>
</tr>
<tr>
<td>81</td>
<td>2.4.2</td>
<td>Skills</td>
<td>7.6.2</td>
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<td></td>
<td></td>
<td>Existing KIM training/development opportunities must be utilized to the full. Providers and users must undertake to collaborate on incremental development of offerings to keep pace with government’s architecture, etc is needed.</td>
<td>SITA training.</td>
</tr>
</tbody>
</table>

**Note:** A proper guideline on what these concepts mean, what is already present in government and what further developments would be appropriate will be very useful. (R30 000)
increased understanding of its needs.

**Note:** SITA could undertake a survey and prepare a guide that details their own offerings, those at tertiary education institutions and commercial service providers. With the help of appropriate SETA’s it could be a quite comprehensive and useful guide. (R30 000)

<table>
<thead>
<tr>
<th>Item</th>
<th>FRAMEWORK RECOMMENDATIONS</th>
<th>PROPOSED FOLLOW-UP</th>
<th>Possible project leader</th>
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</thead>
<tbody>
<tr>
<td>82</td>
<td>Develop a procedure for briefings to GITOC and the government IT community in general on trends and developments that affect IT in general, including KIM.</td>
<td>7.6.3 Approach SITA. SITA</td>
<td></td>
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<tr>
<td></td>
<td><strong>Could be part of the technology scanning exercise proposed above.</strong></td>
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<tr>
<td>83</td>
<td>Utilise SITA and the CPSI to promote innovation in the form of piloting and prototyping.</td>
<td>7.6.3 Approach CPSI CPSI and SITA.</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>When implementation of expanded KIM strategies have progressed sufficiently, training needs should be reviewed by analyzing required job performance, deducing training objectives, training content and other characteristics from them, so that training development can follow.</td>
<td>7.6.2 Review in 6 WG months</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>The GITO Council launch a project to investigate generic IT skills development in government to address the widespread need for enhanced ICT and KIM skills, among IT professionals as well as among employees in general.</td>
<td>7.6.2 Refer to GITOC. GITOC</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>Nominate a suitable entity to compile specifications for generic knowledge processing skills development and to propose action to be taken to develop and implement</td>
<td>7.6.2 Identify a WG suitable expert.</td>
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<td>Item</td>
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<td>87</td>
<td>Parties tasked to investigate the establishment of COPs (Section 7.5.5.c and elsewhere) should also investigate training strategies for that discipline, either through the COP or through other methods.</td>
<td>7.6.2 Approach DPSA</td>
<td>Learning &amp; KM Network.</td>
</tr>
<tr>
<td>88</td>
<td>Knowledge</td>
<td>2.4.4 ENSURING SUPPORT FOR KIM</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>3 Leadership</td>
<td>In development offerings for senior management and above incorporate KIM leadership training as well as sensitization of the importance of leaders’ emotional intelligence for KIM.</td>
<td>7.2 Approach SAMDI</td>
</tr>
<tr>
<td>90</td>
<td>3.1 Review the guidelines for managers’ performance agreements and the accompanying performance assessment in order to ensure a more professional evaluation of their performance regarding KIM.</td>
<td>7.5.1a Approach DPSA</td>
<td>DPSA</td>
</tr>
<tr>
<td>91</td>
<td>Review available management development instruments and assess whether they meet the needs posed by KIM.</td>
<td>7.5.1a Approach</td>
<td>SAMDI</td>
</tr>
<tr>
<td>92</td>
<td>The proposed system of KIM measures (Section 7.7) should include measurement of the suitability of organizational climate for KIM.</td>
<td>7.5.2b Incorporate under &quot;Measures&quot;.</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>Include assessment of the opportunities that exist for the development of informal</td>
<td>7.5.5e Approach DPSA</td>
<td>DPSA</td>
</tr>
<tr>
<td>Item</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
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<td>95</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
<td>DISCUSSION</td>
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<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
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<td>FRAMEWORK</td>
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<td>FRAMEWORK</td>
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<td>FRAMEWORK</td>
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<td>101</td>
<td>FRAMEWORK</td>
<td>RECOMMENDATIONS</td>
<td>DISCUSSION</td>
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</table>

- The GITO Council should, on an indefinite basis, advise on goals and priorities for the KIM function in government. The exact mechanics of doing so should be determined annually based on the structures and procedures that are in place, amongst others as part of the Medium Term Expenditure framework.

- Ensure that guidance on creating learning organisations, in the form of training or otherwise, is available for managers in the public service.

- Develop a statement of strategic intent once the vision statement has matured sufficiently.

- GITOC’s immediate role should be to:
  1. Develop guidelines and propose strategies with associated implementation plans for cross-cutting KIM issues
  2. Monitor the further development of guidelines and support for institutions to enable them to establish successful internal KIM
  3. Ensure coordination of KIM-related projects with transversal implications
  4. In the longer term it should ensure adequate involvement in KIM activities that go wider than only government, including KIM among the client population as well, undertaken with suitable partners.
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<tr>
<th>Item</th>
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<th>Possible project leader</th>
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<tbody>
<tr>
<td>102</td>
<td>3.1.2</td>
<td>Subject to GITOC acceptance of the recommendations in this report, the WG liaise with the parties responsible for taking action to compile action plans.</td>
<td>11</td>
<td>WG to attend to WG this.</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>3.1.4</td>
<td>Monitor the execution of above action plans.</td>
<td>11</td>
<td>WG to attend to WG this.</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>3.1.5</td>
<td>Compile action plans for the WG to address outstanding issues raised in this report.</td>
<td>11</td>
<td>WG to attend to WG this.</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>3.2.1</td>
<td>Visioning</td>
<td>6</td>
<td>WG to attend to WG this.</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>3.2.3</td>
<td>Visioning</td>
<td>6</td>
<td>WG to attend to WG this.</td>
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<tr>
<td>107</td>
<td>Needs determination</td>
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<td>108</td>
<td>Mentoring</td>
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<td>109</td>
<td>3.3.1</td>
<td>Establishing a KIM culture</td>
<td>7.3</td>
<td>Consider using HSRC an existing guideline, e.g. EU or UK.</td>
<td>Identify a SITA suitable expert.</td>
</tr>
<tr>
<td>110</td>
<td>Communication</td>
<td></td>
<td>7.5.1b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>3.4.1</td>
<td>Web portal</td>
<td>6</td>
<td>Investigate WG GITOC portal.</td>
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</tr>
<tr>
<td>112</td>
<td>3.4.2</td>
<td>Establish a suitable web portal for the KIM WG</td>
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<tr>
<td>113</td>
<td>3.4.3</td>
<td>Place the vision statement on the www.</td>
<td>6</td>
<td>WG to attend to WG this.</td>
<td></td>
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</table>

**Note:** The need for change management is becoming bigger and it is often not clear how much authority speakers on the topic can lay claim to. SIUTA could research the topic and establish itself as the best authority for government to consult. (R20 000)
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<tr>
<th>Item</th>
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<th>DISCUSSION</th>
<th>PROPOSED FOLLOW-UP</th>
<th>Possible project leader</th>
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<tbody>
<tr>
<td>114</td>
<td>3.3.2</td>
<td>Communication strategy</td>
<td>Develop a comprehensive KIM communication strategy as a support tool for change management and for promoting KIM in general.</td>
<td>7.5.1c</td>
<td>Approach GCIS</td>
</tr>
<tr>
<td>115</td>
<td>3.3.2a</td>
<td>Executive management</td>
<td>Compile an interim report to the Minister of Public Service and Administration.</td>
<td>11</td>
<td>WG to attend to</td>
</tr>
<tr>
<td>116</td>
<td>3.3.2b</td>
<td>Senior management</td>
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<tr>
<td>117</td>
<td>3.3.2c</td>
<td>Other ranks</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>118</td>
<td>3.3.2d</td>
<td>Clients and other stakeholders</td>
<td>Continue debate and refinement in the WG</td>
<td>3</td>
<td>WG to attend to</td>
</tr>
<tr>
<td>119</td>
<td>4</td>
<td>Conceptualisation</td>
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List of abbreviations:

- KM - knowledge management
- LKM - learning and knowledge management
- DPSA – Department of Public Service and Administration
- SAMDI – South African Management Development Institute
- CPSI – Centre for Public Service and Administration
- SMS – Senior Management Service
- MMS – Middle Management Service
- HOD – Head of Department
- HR – Human Resources
- IT – Information Technology
- ICT – Information and Communications Technology

ANNEXURES
ANNEXURE A
PROJECT PLAN FOR THE ROLL OUT OF AN INTRANET (G2G) SOLUTION FOR THE PUBLIC SERVICE

Aim
To provide a single entry point for all Public Servants and Government for all their information, knowledge, communication and collaboration needs.

The project also aims to provide a central platform where application and services can be hosted and shared with the rest of the Public Service. Through this process an attempt will be made to minimize duplication

Principals of the solution
The source code of the application remains the property of the Public Service and no licence fees are applicable.

The solution is developed that different communities can be set up and the different modules can be re-used in each of the communities.

The solution was also developed to allow the administrators the maximum flexibility without the dependency on programmers.

The solution also attempts to allow for the publishing of material by line managers without the necessity of a third (technical) party.

Activities
The following activities will have to be completed to ensure a successful deployment of the solution:

• Development of the technical solution.
• Setting up of administrative structures that will give ±150 people the necessary rights and skills to maintain the portal on their level and ensure to optimal use of the system. The administrative role aught not be a full time position but it will depend on the number of users and functionality under the control of the administrator.
  o Develop policy – A policy must be developed to indicated what rights must be given to the administrators and a framework must be created to ensure consistence across the portal.
  o Training – The appropriate training material must be developed and the administrators must be trained in the use of the system.
  o Monitoring – A procedure must be put in place to monitor the quality of work done by the administrators.
• Setting up of content management structures
  o Develop policy - A policy must be developed to indicated what rights must be given to the content providers and managers and a framework must be created to ensure consistence across the portal.
  o Training - The appropriate training material must be developed and the content providers and managers must be trained in the use of the system.
  o Monitoring - A procedure must be put in place to monitor the quality of work done by the content providers and managers.
• Roll out of solution
Market the site to all Public Servants
- Coordination of the expansion of the site to other topic areas
- Coordination of enhancement and development of the site.

ANNEXURE B
How narrative databases work

Narrative databases attempt to recreate as closely as possible the ways people share knowledge in face-to-face encounters at work or socially. There are two basic steps to create a narrative database. First is “capturing” the stories and second is creating an index that makes them useful. Capturing the story uses tape recorders or interviews in the field. Faced with a choice between drawing down best practice from a knowledge management “system” and hearing the stories of eight or nine trusted individuals about their experiences, the vast majority would choose the stories. Narrative works in the same way, recording experiences as they occur, and accessing them through high abstraction criteria such as archetypes and themes to reflect the natural process of enquiry. As I enquire of the system I can record new stories, and hot link both new and old stories to more explicit knowledge material. A word of warning though. There are a lot of amateurs operating in the field of organizational storytelling (many of them from story telling professions such as journalism, who think the skills transfer without amendment), and secondly, too many organizations can’t resist telling people what the stories mean and which they should read.

Below is an example of a narrative, provided by IBM, which has a patent on the anecdotes and the indexing. Archetypes for this story would be “apathy” and “principled.” The stakeholders for this narrative would be “staff,” “bankers,” and “students.” The theme would be “harmful effects.”

The database might produce this narrative from various searches. For example, someone in the marketing department might be searching for material to produce a new ethical product to differentiate the organization from the competition. They would ask the database to call up stories around the theme that products can be harmful, told by students. Or a trainer could be looking for material for a new training course for branch managers and ask the database to call up stories around the theme that products are harmful. The story would also be useful for a manager assigned to a new location who is trying to understand the issues he or she will be involved in.

The value of narrative databases is that queries produce several anecdotes, giving users many different perspectives.

Name of narrative: “Someone was killed years ago”

Transcript: “The first time in my life I met a banker, any banker, I mean, the first I saw in my life was while we were in Australia a month ago. We actually wanted to talk to this banker about student activities and other stuff, so credit cards were not the topic of the story. But then he, somehow we talked about the range, and then he came up with a story, that – no, he doesn't sell credit cards to students. Why? They are bad. Why? Because in his university, when he went to school, somebody was killed by using credit cards. (Killed?) Killed, yeah. (How killed?) Yeah, he killed himself, because he couldn't face his parents. Oh and by the way, he was depressed. When did it happen? Ah, maybe twenty years ago. Who still knows about it? Yeah, maybe the doctor in the infirmary. (But he's retired.) But he's retired, yeah – you were – two of us. (People who don't know.) So.”

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ANNEXURE C
CHECKLIST OF ISSUES TO CONSIDER WHEN ESTABLISHING FORMAL KI SHARING ORGANISATIONS

1 Definitions
2 Understandings between the parties (morally or legally binding)
4 Participation: Categories of membership
5 Framework for content sharing activities
  5.1 Purpose
  5.2 Goals of content sharing
  5.3 Involvement of the Participants
  5.4 Scope of Activity
6 Governance
  6.1 Establishment and composition of governance structure
  6.2 Termination or downgrading of participation
  6.3 Objects of the Governing Board
  6.4 Functions and powers of Governing Board
  6.5 Chairperson and deputy
    6.5.1 Selection
    6.5.2 Term of office
  6.6 Meetings of Governing Board
  6.7 Allowances payable to members of Governing Board and its committees
  6.8 Administrative and research functions of Governing Board
  6.9 Funds of the Board
  6.10 Annual and other reports
7 Responsibilities of the organisation hosting the secretariat
8 Functions of the Secretariat
9 Functions of the executive secretary
10 Association and disassociation of participants
11 Knowledge and information architecture
12 Obligations of participants
  12.1 Standards
    12.1.1 Setting
    12.1.2 Adherence to standards
    12.1.3 Avoidance of duplication of capture
  12.2 Responsibilities of data custodians with respect to security of data
  12.3 Provision of access to information
13 Interfaces
  13.1 Government institutions
  13.2 Institutions outside government
  13.3 Principals
14 Financial arrangements
  14.1 Contributions
  14.2 Costing
15 Intellectual property rights
16 Licensing agreements
17 Data custodians
  17.1 Capturing
  17.2 Maintenance
  17.3 Providing access/ distribution
  17.4 Appointment of data vendors and data vendor obligations
  17.5 Response required of data custodians to the reporting of errors
  17.6 Steps to be taken if data custodian fails to respond
18 User obligations
19 Housekeeping arrangements
  19.1 Amendments to content sharing agreement
  19.2 Winding up

ANNEXURE D
SOCIAL NETWORKS

“Introduced by Stanley Milgram in 1967, the theory of six degrees of separation, which supposes that you’re just a half-dozen introductions away from anyone you want to meet, has found the Internet. Sites like LinkedIn, which take hold of the six degrees concept and put it to practical use, let you take advantage of chains of acquaintances to contact people down the line. They’re known as social networking services. Such services use the Internet to help users expand their networks of personal and business relationships.

The process is simple. After joining one or more of these sites, you send messages to people you know, asking them to join too. They in turn invite people they know, and soon in this way, you construct an enormous network. In others, you can contact someone only by requesting an introduction through a mutual acquaintance or chain of acquaintances. The basic idea is always the same. When you contact someone, you’re not contacting a complete stranger. The person has a reason to trust you. And you have a reason to trust that person.

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The sites (reviewed in the issue of PC Magazine from which this quote comes) are similar in concept but different in implementation. (Two of the sites) focus on building professional relationships as well as helping you find a new job, hire new employees, hunt down new business partners, or seek professional advice. Others ... are more geared towards after-hours relationships. They're great for finding a date or a new group of friends. (Another site) has a feature that lets members come together in discussion groups or Tribes.

All the services in our roundup, except (one), are in beta, so it's hard to say whether they will prosper. Their effectiveness comes down to how many people use them. (One site) boasts 3 million users, none of the others has even approached 100 000. The basic idea at the heart of the sites is certainly a sound one, though.”

(Names of vendors have been edited out of the above quote. In the magazine itself the quote is followed by actual reviews of the sites referred to.)

ANNEXURE E
GUIDELINES FOR UTILISING JUST-IN-TIME (JIT) KIM
Some guidelines for implementing JIT KIM are as follows:24

a. Ensure a diversity of approach

Technology is a useful tool, but should not become a fetish. A good tool fits the hand and is largely forgotten despite its usefulness; a bad tool in the technology field too often requires not only the hand, but also the brain, to be bio-reengineered to enable its use.

Mechanical systems have a tendency for conformity, and creation of “universal” good practice, as there is, in theory, an ideal design. Organic systems in contrast encourage diversity. One of the main implications of this is to avoid purchasing a knowledge management system in the way that enterprise-wide resource planning systems are purchased. Each organization is unique; and individuals work in different ways. Some have messy desks, while others are neat and tidy; some enjoy virtual chat, while others despise it; some multi-task, some work on one task at a time. Attempts to impose uniformity on the rich diversity of human behavior will damage the knowledge base, and will not succeed…”

b. Don’t impact on people’s time

“Time is the main enemy of knowledge management, followed closely by fears of abuse, and, at a distance, by the more common desire to retain power.

In the modern organization, e-mail traffic based on one-to-one communication has risen to levels where it has a growing negative impact on knowledge worker productivity. We can see this in common e-mail practices, such as mass copies, blind copying, task avoidance through a request for new data just to get an e-mail “out of the system,” and many others.

c. Connect people, build networks

The number of respected pioneers in knowledge management who emphasize connecting people over codification is only matched

24 Adapted from Snowden DJ, The knowledge you need, right when you need it, KM Review Volume 5 Issue 6, January/February 2003, pp 24 – 27.
by the number of managers who read and praise their thinking, then proceed to do the exact opposite. We resist the concept of arranged marriages, so why should anyone think the same approach can apply.

Yellow pages rely on people to codify their expertise and maintain data. In the early days, they are novel, so people participate. But usually within a year the systems are neglected or abused, as people either do not have the time, or manipulate their entries based on perceived futures within the organization they work for. Expertise locators, on the other hand are non-intrusive in that they either map affinities based on access to knowledge or trawl e-mail to indicate evidence of expertise. The better ones respect the paradox of privacy: if I allow someone to keep their knowledge private then they will share it; if I tell them to share it they will keep it private. To be asked if I know something in the context of the need, is more likely to elicit a response than to be asked to codify knowledge in the absence of that context.

Many aspects of e-mail use are showing all the evidence of addiction. ... We have started to devise programs in which we use some of the techniques developed in rehabilitation clinics to break addictive patterns of one-to-one communication, often by cold turkey techniques: closing e-mail down for a period before bringing up collaborative systems, habituating people to many-to-many tools before allowing one-to-one but then banning all copies and all attachments.

To allow true cooperation for knowledge tasks, a good general rule to apply is this: any knowledge task for a knowledge worker requiring a time commitment, requires a prior explicit gift of at least twice that time. If you want a group of consultants to devote 40 minutes a day to knowledge sharing, then give them a low paid clerk to handle expense forms and timesheets – then they will help. Simply appeal to their sense of duty and loyalty to the organization and you are doomed.

d. Social network stimulation (SNS)

SNS works by taking the natural process of network building and accelerating it. Normally, over several years, as I work on different projects in different departments, and meet people socially, I build a network, and hear stories that allow me to operate effectively in an organization. Mentor schemes, good induction, and narrative can all help. However, it is now possible to reduce five years of accidental networking to five months, or even five days in a task-based environment. In SNS we focus less on managing knowledge, but on managing the channels through which knowledge flows.

A common theme in the above examples is to allow communities to form based on natural preferences, although SNS does it within a set of top-down, determined heuristics. Telling people they should work together can clash with the basic chemistry of human interaction and is inefficient.

e. See where people walk before you build paths

A good designer observes patterns of human interaction before designing – for example, planting grass and observing where people walk before investing in a path. Of course you can also grow a hedge or build a bridge to encourage patterns.

Here we need to understand that in dealing with complex systems, all interventions are also a form of diagnosis and vice-versa; partly because any attempt to study a complex system changes the system being studied. This means that in managing a complex system (and by implication all knowledge management is predominantly about complex rather than ordered systems), we intervene
with multiple small probes so that the most natural patterns of behavior are revealed. Some examples will illustrate this approach:

f. Narrative databases

Narrative databases provide a quick and easy way to see how a “lessons learned” program should be implemented.

Any knowledge holder can record into a tape recorder in two to three minutes what they would otherwise spend a few hours writing. The sheer volume of material that can be captured in narrative form is far higher than can ever be formally codified. Because such systems are self-indexing they can be built and populated quickly, allowing the central designer to observe patterns of use before committing to the cost of codification. The designer can see which stories are accessed, in what context, and how they are used in practice, rather than trying to hypothesize on the basis of interviews which do not reflect the real nature of acts of knowing in the first place. See also

ANNEXURE B.)

g. Conclusion

All of the above examples rest on observing the natural process of knowledge creation and transfer, then using technology as a tool, if appropriate, to ensure that such natural processes can be accelerated and scaled. In all cases they focus on self-organization, albeit within imposed boundaries. In complex systems we embark on journeys and respond to the environment; in ordered systems we determine our goal and then engineer to achieve it. The results and the approaches are different and complementary.

Just-in-time is not just about embedding knowledge into process through artefacts, although that is valuable and often necessary, but expensive. It is also about creating a human ecology in which knowledge self-patterns, and being aware of when those patterns are stable enough to justify the cost of embedding. It is about diversity within boundaries, using technology as a supporting tool, not as an overriding fetish, and above all, about recognizing that humans are more than capable of achieving results without constant control. Very few senior executives would dream of treating themselves or their children in the way that they treat their employees, and it is time for less hypocrisy in KM and associated system design.

References


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