Achievement of Market-Friendly Initiatives and Results Program  
(AMIR 2.0 Program)

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Knowledge Management Strategy –  
Workshop Outcomes

Final Report

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This report was prepared by Andrew Ford and Lubomir Dvorsky, in collaboration with The Services Group Inc., contractor to the U.S. Agency for International Development for the AMIR Program in Jordan.
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Abstract

This report includes a presentation on knowledge management given on 7 September 2003 to agencies participating in the Center of Excellence program. It also includes the outcomes of workshops held with each agency which were held to help provide a framework for a detailed knowledge management strategy, including a set of follow-up actions for implementation.
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Executive Summary

A formal presentation on Knowledge Management (KM) was given to COE participants on the 7 September 2003 at the Hotel Marriott in Amman. The first part of this report reviews the presentation that was made.

The presentation was followed up by a series of individual workshops for each of the COE partner agencies on 8-9 September 2003. The individual outcomes for each of these workshops are listed below, in addition to a compiled set of actions to be followed up by each agency. A detailed framework for undertaking a detailed KM strategy was presented at both the presentation and the workshops, and it is expected that each agency will now begin to pull together the respective elements of this strategy as part of their COE activities.

When reviewing the outcomes of the individual workshops and compiling these results into a single table, the following conclusions were made:

- Each agency complained of poor communication both vertically (from the Director General and senior executive to middle management and to line-employees and vice-versa) and horizontally (between business lines or “silos” within the organization);

- Most agencies expressed concerned about poor delegation of authority, knowledge hoarding and a reluctance to mentor or provide on-the-job training. Knowledge as power is a prevailing mindset and poor or non-existent workforce planning (human resource planning and development) has resulted in a lack of succession planning and risks exposing each agency to critical shortages in knowledge and skills in the future;

- Inflexible Civil Service Bureau regulations limit the ability of organizations to introduce new forms of incentives or rewards for knowledge sharing/best practice performed by teams or by individuals within their agencies; and

- No agency addressed the need to measure any of the recommended actions proposed. This suggests that either the return on investment for the KM-related measures is not understood at this point in time or that such KM-related initiatives are novel and there is no experience against which these measures can yet be measured and compared.
1. **Background**

The Government of Jordan, under King Abdullah II, has continued the open economic policies started by the late King Hussein, accelerated Jordan’s entry into the global economy, and recently adopted a new, socio-economic plan which, among other things, espouses private-sector led economic development based on private investment.

However, a great deal of work remains to be done to assist various important economic-oriented ministries to move beyond their traditional roles as regulators of industry and commerce, and adopt more proactive roles as facilitators of an enabling environment attractive to investors and enterprises, and as knowledge managers for better informing government and private sector decisions. These new roles need to be consistent with international best practices in excellence in government and accelerated economic development, and imply significant shifts in paradigm that will have to be carefully managed. Fundamental to the new way of operating is the adoption of effective strategic planning, management and leadership.

The Ministry of Industry and Trade (MIT), Ministry of Planning (MoP), Jordan Institute of Standards and Metrology (JISM), Ministry of Information and Communications Technology (MICT), Jordan Investment Board (JIB), Jordan Economic Development Corporation (JEDCO), Telecommunications Regulatory Commission (TRC), Security and Depository Commission (SDC), and Customs Department are all working with the AMIR Program Centers of Excellence (COE) program to achieve COE status.

Much work has already been done to assess goals, objectives, lines of responsibility and current and future foci and directions of these partners. All of these institutions are currently engaging in some form of strategic planning with COE support. Furthermore, all of these institutions have formed COE teams of six to eight senior staff members who are dedicating their time to achieving substantial and sustainable institutional reform in line with international best practice standard for government.

For these teams to be better informed as to where their institutions stand with respect to the international best practice standards, the COE program has worked with individual team members in each of the five COE criteria to carry out a benchmarking self-assessment (refer Appendix 1). These assessments will serve to guide COE teams as they conceptualize and carry out internal reforms. To follow up on this work, the COE program is sponsoring COE forums in each of the five COE criteria: Leadership, Human Resources, Knowledge, Processes, and Outcomes. Forums are COE program-sponsored events through which COE team members responsible for like criteria from different institutions can come together. They serve to identify shared opportunities and constraints, discuss best-practices and successes, and leverage ongoing initiatives. They also serve to target priority areas for shared future technical assistance.

As part of the COE program, the consultants were engaged to address the Knowledge criteria of the COE program. This included the following:
1. Training partner institutions on the fundamentals of KM, including what KM is, how to develop a strong KM strategy, and how to communicate an understanding of the value of effective KM across the organization; and

2. Assist the eight COE partners to develop and implement strategies and systems for identifying knowledge needs, capturing knowledge and information, analyzing the cost/benefit of information and/or knowledge acquisition and, most importantly, sharing knowledge across divisions, with field operations, and with stakeholders.

To this extent, a formal presentation on KM was given to COE participants on the 7 September 2003 at the Hotel Marriott in Amman. The first part of this report reviews the presentation that was made.

The presentation was followed up by a series of individual workshops for each of the agencies mentioned above on 8-9 September 2003. The individual outcomes for each of these workshops are listed below, in addition to a compiled set of actions to be followed up by each agency. A detailed framework for undertaking a detailed KM strategy was presented at both the presentation and the workshops, and it is expected that each agency will now begin to pull together the respective elements of this strategy as part of their COE activities.
2. **Statement of Work**

The consultants were asked to undertake the following work components:

1. Carry out a group training covering the fundamentals of KM, including how to develop a strong KM strategy, and how to communicate an understanding of the value of effective KM across the organization;

2. Provide best practice resources and case studies for participants to continue building their KM skills;

3. Carry out follow-up workshop involving an interactive question and answer session with COE team KM personnel;

4. Work with AMIR Program communication team to agree upon recommended communication tools for COE partner agencies;

5. Advise consultants carrying out “knowledge sharing” portion of this scope of work, recommending strategies and approaches for ongoing follow-up and effective integration of KM tools in partner institutions; and

3. **Knowledge Management Presentation**

3.1 **Why is Knowledge Management Necessary?**

Why is KM necessary?

![Image](image.png)

Figure 1: Why is Knowledge Management Needed?

Evolution of wealth creation
Medieval period: wealth = land
Industrial era: wealth = turning over capital
Knowledge era: wealth = acquisition and use of knowledge

There are a variety of reasons why KM has emerged as an issue of critical importance to organizations. Some of these have their roots in the corporate downsizing and outsourcing that occurred in the late 1980s and early 1990s. Other reasons include the rise of the digital economy associated with the ubiquity of electronic delivery of services associated with the Internet.

The nature of wealth creation has been changing over the last few hundred years – knowledge has become more important in terms of wealth generation, corporate competitiveness and operational/organizational effectiveness. In Australia, 80 per cent of the gross domestic product (GDP) is now being generated in services – driven by knowledge; whereas 15 per cent of GDP is in manufacturing and only 5 per cent in agriculture.

3.2 **Definitions of Knowledge Management**

Knowledge management is not well understood – it is an evolving and emerging discipline that is probably impossible to standardize – even though this is being attempted (e.g., Australian Standards Interim Knowledge Management Standards).
There are too many competing definitions and too much hype by the vendor and consultant community. It is best to keep things simple by using a definition that makes sense to your organization to help the enterprise understand KM, which should include:

- What KM is and what it is not
- What the organization expects
- How you are going to do KM
- Why it is important to your organization
- Who is involved in the effort
- Why employees should care – what is in it for them
- What are the consequences of not doing KM both for the organization and for its members
- What behavioral changes need to be made for a success KM initiative

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**What KM gurus say**

Knowledge management is the art of creating commercial value from intangible assets. **Karl Erik Sveiby**

Knowledge management is a formal, structured initiative to improve the creation, distribution, or use of knowledge in an organization. It is a formal process of turning corporate knowledge into corporate value. **Thomas Davenport**

Leveraging the processes and content of intellectual capital to enhance the organization's ability to achieve its mission. **Computer Sciences Corporation (CSC)**

Knowledge Management is promoting ongoing business success through the systematic acquisition, synthesis, sharing and use of information, insights and experiences. **Andersen Consulting**

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**Figure 2: Definitions of Knowledge Management**

Many people have addressed KM in the past – while none of the definitions provided in Figures 2 and 3 are inadequate, by and large they remain incomplete. We require a more holistic understanding of KM.
Knowledge Management Strategy – Workshop Outcomes

What KM gurus say

Knowledge management is to enhance performance through a purposeful and systematic approach to the creation, development, and application of knowledge to the value-creating processes of an organization. *McKinsey & Co.*

Knowledge Management is a set of practices that allows/enables organizations to better create, understand, and utilize what they know. *IBM Consulting Group*

Knowledge management is a set of processes for identifying, filtering, and organizing what we know for the purpose of sharing the knowledge with each other and leveraging it so that it provides value for our clients. *American Management Systems*

How do we know when we are practicing KM? Just because you have been given a manual on KM associated with the COE program, and just because you have not called it KM before, does not mean that you are not doing it somewhere within your organization. Go through each of the examples mentioned here and think about where you may be already doing KM without realizing that you are doing it.

- Blacksmith – does he practice KM?
- Einstein in the desert – what use is his knowledge in that context?
- Pulling the rope – the importance of teamwork and collaboration
- Engine in the shoebox – there needs to be balance in effort expenditure
- High performance teams – emergent properties
- Everybody understands their contribution to the organizational goals – wartime and teaching of English to Czechs.
- KM after downsizing – CSC example.

3.3 The Pyramid of Knowledge

Just as with a crossword puzzle, information is only useful if it is used in context. Data is any manifestation in the environment, including symbolic representations that in combination may for the basis of information. In combination it tells us what is going on within an organization.

Information is data in context to which meaning has been attributed – it tells us why certain things within the organization are happening. Knowledge is a body of
understanding and skills that is constructed by people. Knowledge is increased through interaction with information (typically from other people). It helps us answer “what if” type questions – what if we change this, or do that?, etc. Wisdom comes through accumulated knowledge over a long period of time. Those who possess wisdom know what to do.

It is also helpful to distinguish between tacit knowledge and explicit knowledge. Tacit knowledge is knowledge that resides in a person’s mind and may include aspects of culture or “ways of doing things”. Explicit knowledge is knowledge that has been recorded as information in a document, image, film clip, recording or some other medium.

Knowledge has been discussed throughout history as an important branch of philosophy (epistemology). It takes many forms – it can transient and elusive or practical and able to be captured. It can be exchanged as an object or considered as a flow. It can be kept of a long time, or can be kept only for a short period of time. We will address all of these aspects shortly.

Figure 4: The Pyramid of Knowledge
3.4 Knowledge Management – Practical or Management ‘Hype’?

The Gartner hype cycle for KM places each of the KM “solutions” into perspective. Knowledge management in general has gone through the same development. Everybody wants a silver bullet to solve problems. Consultants and IT companies offered the silver bullets, raised expectations and mostly did not deliver. The outcome of this has been failure, disappointment, cynicism and confusion. Indeed for many, KM has become yet another management fad.

![KM hype as seen by IT industry](image)

**Figure 5: Knowledge Management and the Gartner Hype Cycle**

3.5 Our Approach to Knowledge Management

The definitions provided in Figures 2 and 3, while good tend to be abstract. We want to move from the books to concrete reality; from the academic to the practical. We want to focus on implementation, action and results. We want to convert guru statements into something that both we, and you, can relate to. Our approach is different because we do not just want to end up with a strategy containing abstract words and motherhood statements – we want to see it implemented and result in concrete actions. Our objective is to see the organization adapt a strategy that moves it from where it is today to where it wants to be – using knowledge management as a powerful force for change.

Go back to the gurus’ definitions in Figures 2 and 3 – we want to use a much simpler framework to describe KM. It starts with strategy:
• What do we do?
• Who do we want to become?
• Where do we want to go?
• How do we do what we do?
• What do we need to know to do what we do?
• Who needs to know about what we do?

This links to the COE work regarding strategic planning – what the consultants are doing is to continue and complement this work. The major value add of this is to get people thinking about these things.

![KM and the COE Framework](image)

**Figure 6: Knowledge Management and the COE Framework**

Where do we start? With asking some of the following questions:

• Why do we do strategic planning?
• Why do we produce a vision statement?

Because….

• We want to evolve
• We want to change to something better, be more effective and more competitive
• We are committed to change.
All of this links to national goals – what each Government agency does to mobilize its knowledge to help it achieve its mission has broader national implications – it will make Jordan a better place. It is important to have a vision for a knowledge-managed organization. Here is one that the consultants did for a small public sector agency in Australia.

![Our vision – What do we want to become? The “dream”. “To be”](image)

**Our vision – What do we want to become? The “dream”. “To be”**

Your organization is an amazing place. Where once invisible walls separated operating units, complicating and discouraging communication and knowledge exchange, there is now free flow of information. No one is reluctant to seek—or offer—assistance within the local office or across the country. People know whom to ask or where to go to find the information they need. People seldom seem too busy to help one another, and there exists a great spirit of cooperation.

Virtual communities of interest have sprung up, promoting informal knowledge exchange and the development of relationships, and helping individuals feel more a part of the bigger organizational team.

Communication from the top is now quicker, messages are more clearly understood and feedback from staff is both qualitatively and quantitatively better. No one feels left out of the loop.

![Figure 7: A Knowledge Management Vision](image)

The organization that wished to achieve this vision articulated the following in its KM Strategy:

**Minimal Knowledge Loss**

While there is the normal employee attrition as the older population continues to retire, there is now only minimal threat to the organization of knowledge loss. The leadership team realises that some turnover is necessary for organisational health. Recruitment, selection, and succession planning practices contribute to this sense of confidence, as the organisation is clear on the knowledge and skills it has and needs today, and those that will be needed tomorrow. The clarity and commitment to the organisation’s vision, mission, direction, and strategic plan has made it possible to develop an effective knowledge and skill assessment and development program.

**Skills Transfer**

Mentoring and coaching, formal and informal, and other forms of partnering on tasks and assignments, enabled by simple, intuitive but powerful IT tools, assure that the knowledge and skill once resident in senior employees is now transferring to newer and
younger employees. Everyone is proud of how well these partner approaches are working: not only are knowledge and skills being shared and future capability built, but productivity and effectiveness have actually improved. The employees of the organization have “tapped into” the heart of performance and continuous improvement of the organisation. Knowledge management-related technology and associated business processes improvements promote performance improvements, providing people what they need, just when they need it, and where they need it. There has been a substantial reduction in duplication of effort and cumbersome work methods and procedures.

**Supporting Tools**

People have embraced new tools and ways of working, making them integral parts of their knowledge and performance culture. People know how to use these tools and processes to get the most out of them, and while they have never lost their tendency to critically question, they appreciate the costs and dangers of neglecting and circumventing the tools and processes available to them.

A vibrant knowledge environment, which includes recruitment and selection, succession planning, a performance management system, and induction / orientation all contribute directly to building and reinforcing a culture that thrives in and capitalises upon the organization’s strengths. From initial concept to full deployment of the KM environment, leaders have been clear on operational principles and what they are trying to achieve. They have known what management behaviours are required to cultivate the environment. Everyone in the organisation is clear on what is expected of them in terms of performance and knowledge, and expectations are continually reinforced through internal memoranda, professional development, and the conduct of day-to-day work, including the focus and approach to teamwork and running meetings.

Not only is knowledge sharing and building future capability a source of pride for employees, but also they feel a deep sense of responsibility for contributing to this. A set of project management systems, delivered through the Knowledge Management Office (KMO), helps to support this. They know that in return for a challenging and fulfilling career at the organization that they must do their part to promote and facilitate the growth and development of their peers and to create a knowledge and performance culture that endures and evolves to meet ever-changing demands and circumstances. The KM tools and processes they have in place help them do this, but in the end they know that its people first.

After articulating the vision, we also need to understand the starting point – what are today, that is, the “as is” situation as at today. This involves understanding the following:

- Organization – are we empowering our people?
- Leadership – is this visionary and transparent?
- Culture and behavior – do we reward and recognize knowledge-sharing, teamwork and collaboration?
- Values and ethics – are the values today the same that we want them to be?
3.6 Knowledge Management Strategy

Before we can say what a knowledge management strategy looks like, we first need to say what a strategy is.

- A strategy is the pattern or plan that integrates an organization’s major goals, policies, and actions into a cohesive whole. At its simplest, a strategy can be a very specific plan or action directed at a specified result within a specified period of time.

- A KM strategy is therefore a specific plan of action, laying out the activities necessary to embed knowledge management into an organization within a specified period of time.

- A strategy will create a picture of how the organization’s KM capabilities will be integrated into a cohesive whole (like bits of a jigsaw puzzle).

It should be designed to guide investment in the right resources – human, structural, organizational and technological – to drive the KM initiative and it should highlight the skills, the cultural change, organizational change, content required, and the technologies and toolsets needed to support it. The realization of the organization’s mission and goals MUST always be the aim of a KM strategy. A KM strategy must therefore be consistent with other organizational investments and with decisions made elsewhere within a strategic context.
3.7 Understanding Change

What we hope to achieve through the workshops is a better understanding of the forces driving or inhibiting the changes we seek from your organizations.

- How can we handle the obstacles we come across?
- Does it make sense to develop a risk management plan – assess the likelihood of these inhibitors and plan ways and means around them.
- Understanding complexity and addressing relevant and well-understood risks.
- For example, is the Civil Service structure in Jordan a force for change or an inhibitor and what can be done about it?

We need to have a good understanding of forces for and against change – what we call the Force Field Analysis. This consists of the following:

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<thead>
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<th>Forces for Change</th>
<th>Forces against Change</th>
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<tbody>
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<td>Major emphasis on clients</td>
<td>Administrative history, culture and business practices</td>
</tr>
<tr>
<td>Major commercialization/decentralization</td>
<td>Public sector bureaucratic organization paradigm</td>
</tr>
<tr>
<td>Desire and need for more modern, more helpful technologies</td>
<td>History of parochialism, information hoarding and poor functionality</td>
</tr>
<tr>
<td>Need to demonstrate performance and value for money</td>
<td>Pessimistic attitude towards arrival of new systems and their value</td>
</tr>
<tr>
<td>Need for efficiency – to do more with less</td>
<td>People feel overworked already</td>
</tr>
<tr>
<td>Restructuring releases vitality and motivation</td>
<td>People fear about cuts</td>
</tr>
<tr>
<td>Important opportunity for leverage</td>
<td>Residual mistrust</td>
</tr>
<tr>
<td></td>
<td>Distributed location</td>
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<td></td>
<td>Breadth of competing initiatives impede progress</td>
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3.8 Final Caveat – Knowledge Management in the Public Sector

Public service is not involved in a simple transaction of services between themselves as a supplier and others as customers, as in private sector. It is much more complex than this. Public sector organizations, while they may see themselves as being run like a business are not profit-driven. Financial management is only one part of accountability amongst many and is not the primary task. Measuring the success of any public-sector organization’s KM strategy must include how knowledge supports the organization’s contribution to national goals.

Need organizations that are:

- Citizen centered
- Efficient and results focused
- Transparent
- Outcome driven
- Provide high quality services to the public
4. Knowledge Management Strategy Framework

The framework that we will use for creating knowledge management strategies for the organizations involved in the COE process include the following elements:

- Leadership, strategy, missions and objectives
- People and culture
- Processes
- Content – Knowledge Mapping and Networking
- Technology
- Barriers & constraints
- Opportunities – identification of quick wins
- Measurement – Return on investment (ROI) and continuous monitoring

These are addressed in great detail below.

![Knowledge Management Strategy Framework](image-url)

**Figure 9: Knowledge Management Strategy Framework**
4.1 Knowledge Management Vision and Strategy

The first step usually begins with locking in executive support – someone who understands KM and then leads the effort to communicate and promote the strategy and its execution. Getting buy-in from senior management, and indeed the rest of the organization may be hard to achieve, but it is CRITICAL to successful implementation of the KM strategy. If you don’t have this, then STOP!

A KM strategist needs to have a good understanding of the whole industry or environment in which the organization is operating in. For example, within a private sector context, this involves the regulatory environment, the level of competitiveness (should a competitive intelligence strategy be adopted?), the dynamics of consolidation (e.g., mergers and acquisitions, etc), and whether the organization works in a domestic or international environment.

Last item here – assessing organizational connectivity: KM is about connecting people with all types of knowledge (internal, external, tacit and explicit). The KM strategy should address how this is to be achieved. E.g., how do employees find subject matter experts, colleagues with similar experience, or people who can handle problems or answer difficult questions? Leveraging what the organization knows is one of the key benefits of investing in KM.

![Figure 10: Knowledge Management Vision & Strategy](image)
4.2 Governance

Finding out where KM should sit in the organization and assigning control and defining leadership roles are the most critical – and potentially difficult – decisions to make. Organizations need to answer the following questions:

1. Where is the organization heading?
2. What is important to the organization?
3. How will its objectives be achieved?

These questions need to be consistent with the organization’s existing structure and culture – how are other resource allocation questions (e.g., capital allocation/approval) and IT spending made? Follow the existing corporate governance model.

Figure 11: Governance

4.3 Culture

The willingness of employees to share/contribute what they know and to leverage explicit content from inside/outside the organization is a critical success factor for KM. Culture and behavior is essential to success KM.

KM usually represents significant change to the organization and the organizations that recognize this and support their KM applications with a change management program are much more likely to receive high returns on their investment. It is important to create a proper environment for knowledge sharing involves understanding the cultural barriers that impede sharing and looking for ways to remove these impediments (e.g. Customs – remuneration based on seizures – why help someone who may be your competitor).
Culture

Critical success factor
KM means change – this needs to be managed
Create the proper environment for knowledge sharing to occur
WIFM = what’s in it for me

Figure 12: Culture

Put yourself in the knowledge worker’s shoes and ask the question: what’s in it for me to share? This may involve some of the following:

- Establish ownership – involve users in planning and development; incorporate and recognize user contributions; solicit and respond to ongoing user feedback
- Design intuitive solutions for work processes – select content for impact; and implement processes consistent with culture and work styles
- Change what is important – demonstrate the value to users; measure use and impact and reward and promote success

4.3 Content Management

Content management (not to be confused with content management systems) is at the heart of KM and is often overlooked. It is concerned with the retrieval, distribution and application of previously acquired knowledge to help workers do their jobs better (single loop versus double loop learning)

Target is: Right content to the right people at the right time – to do this, the KM strategy must identify the content a knowledge worker will need within the context of his own job. Content exists both inside and outside an organization and is both tacit and explicit. We need to understand how each of these domains can be applied to help knowledge workers accomplish their primary business objectives and then create a strategy to make this content accessible. The tool we will use here is knowledge mapping.
4.4 Knowledge Mapping

A knowledge map organizes knowledge that practitioners or knowledge workers need to do their work by providing structures that enable the effective development, recognition, retrieval, and contribution of knowledge. A knowledge map typically comprises a hierarchy of concepts and links from concepts to knowledge. It highlights the organization’s knowledge areas and helps in assessing their degree importance to the organization.

Knowledge mapping provides a visual representation of knowledge processes, sources, assets, flows, gaps and barriers across and within an organization. While there is no standard approach to knowledge mapping, and it is tailored to the knowledge environment of each organization, it generally focuses on people, expertise, communication, relationships, business processes, systems, products and documents.

Information gathering techniques include observation, interviews, group discussion, process tracking, questionnaires and surveys. Knowledge mapping can map expertise, links between people across the organization and identify missing knowledge areas. By making organizational knowledge visible, a knowledge map can support improvements and changes to the way knowledge is used, shared and transferred across the organization.

The K-map provides three benefits:

1. It enhances the ability to find or discover knowledge. Associating knowledge assets to enterprise terminology, information needs and priorities pre-determines their relevance and relationships. K-maps also remove irrelevant information from the user’s path. This reduction of “info glut” reduces user time to access and to assimilate needed information.

2. It adds human value to knowledge. Associating information content from multiple sources and identifying experts within a shared context links their credibility and relevance. This upfront assignment of credibility and relevance reduces user time to validate information and to assemble a critical mass of information for decision making.

3. It translates information into a social context. The ability to search and find knowledge content (both primary sources and related information) using familiar terminology stimulates collaboration and the formation of work communities. A K-map that increases users’ success in locating the appropriate information or people for the user’s task or interest will stimulate subsequent reliance on the KM environment.

K-maps should not replicate the enterprise’s organizational chart – this is simply an administrative tool. In general, if knowledge and experts are difficult to find in today’s organization, building a K-map based on the organization chart will not improve the user’s ability to find them.
In addition, K-maps should not replicate business process maps (P-maps). P-maps represent the flow of work and data through the enterprise to create an end product or service. A P-map continually decomposes higher-level processes into detailed processes. Although P-maps represent relationships among the work steps, they do not group or relate relationships adequately for a K-map. In addition, low-level P-maps contain too finely detailed information to convert to a manageable or navigable K-map. The indexing and the navigation of such a detailed K-map may be so burdensome as to void its usability. P-maps do provide good input into the analysis for K-maps, but they should not be adopted as a design framework without in-depth scrutiny.

4.5 Technology

<table>
<thead>
<tr>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document management</td>
</tr>
<tr>
<td>Multimedia-enabled</td>
</tr>
<tr>
<td>Power of the search engine (indexing, efficiency, etc)</td>
</tr>
<tr>
<td>Flexibility and ease in browsing</td>
</tr>
<tr>
<td>Visualization tools</td>
</tr>
<tr>
<td>Automatic classification (taxonomy/ontology)</td>
</tr>
<tr>
<td>Collaboration and personalization</td>
</tr>
<tr>
<td>Active collection &amp; distribution of knowledge</td>
</tr>
<tr>
<td>Repository creation</td>
</tr>
<tr>
<td>Operational statistics</td>
</tr>
<tr>
<td>Linkages to external sources</td>
</tr>
<tr>
<td>Agent applications</td>
</tr>
</tbody>
</table>

Figure 13: Knowledge Management Technology

It is important to remember that IT is a necessary but not sufficient component of knowledge management. Too many start with IT as the most important aspect of KM but neglect all of the other components addressed in the methodology spelled out here.

4.6 Application and Implementation

It is important to determine where the areas of strategic importance are for the organization. This involves identifying groups or communities of practice within the organization that have common objectives/information needs:

- These are organic not designed
- These need to be energized
The KM Sponsor also needs to communicate the plan to the whole organization and provide visible leadership and commitment to the project. It often helps to think big and start small – search for “low hanging fruit” and easy and early wins. Identify KM practice already underway in your organization and replicate it where it is applicable.

4.7 Measurement

Measurement of the benefits of KM include the following:

- Define objectives and purpose
- Select a method
- Determine specific performance metrics
- Structure the measurement process
- Establish baseline measurement
- Review/modify as needed

This needs to be part of the other COE activities – it is important to keep the link.

The important thing is to remember that if you can’t define what you want success and the future to look like, how will you know when you have arrived there? Ongoing performance is crucial to knowing whether or not the chosen strategy is working or if course correction is required.
Performance Management Framework that measures KM outcomes:

- Increased collaboration within an organization, its stakeholders and project partners
- Improving information sharing between staff and with stakeholders
- Faster responses to the organization’s external environment
- Better coordination of development projects under the organization’s responsibilities.
5. Combined Workshop Results – Outcomes

The following table compiles the action items identified in the workshops held with each agency and organized into the main heading areas addressed in the KM presentation discussed in Chapter 4 of this report. Many of the initiatives that were articulated by specific agencies have potential application across all of the agencies concerned. Therefore, this table represents a menu from which agencies can select specific activities of relevance to them, which could be used as the basis of a knowledge management strategy.

It should be borne in mind that these activities were derived from a four hour workshop covering all components of knowledge management facilitated by an expert in knowledge management theory and practice. A more detailed articulation of these measures will be required, either using the Center of Excellence Knowledge Management criterion or following the components of a knowledge management strategy discussed in the preceding chapter of this report.
Table 1. Components of a Knowledge Management Strategy and the COE Program

<table>
<thead>
<tr>
<th>Description of Activity</th>
<th>KM Strategy Element</th>
<th>Related COE Criteria/Sub-Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communicate leadership vision to all component parts of the organization;</td>
<td>Vision</td>
<td>Criterion 1: Leadership Subcriterion 1: Strategic Planning Framework</td>
</tr>
<tr>
<td>• Run a campaign throughout 2004 as the “Year of Knowledge Management” or a “Knowledge Management Day” within the organization;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Provide a communications strategy so that all employees are aware of the organizations mandate, vision, purpose, objectives and performance;</td>
<td>Strategy</td>
<td>Criterion 1: Leadership Subcriterion 1: Strategic Planning Framework</td>
</tr>
<tr>
<td>• Bring the importance of KM to the attention of senior management so that they will know the importance of critical pieces of information and report this to all interested parties, both inside and outside the organization;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Create a Knowledge Management Office (KMO) that reports directly to the Minister and Director General (Secretary General)</td>
<td>Governance</td>
<td>Criterion 1: Leadership Subcriterion 2: Supportive Culture Subcriterion 3: Relationship with Stakeholders</td>
</tr>
<tr>
<td>• Undertake periodic inter-Departmental meetings, record the discussions and outcomes of these meetings; and make sure that these are distributed to all who need to know within the organization – to employees, managers and committees;</td>
<td></td>
<td>Criterion 2: Human Resources Subcriterion 2: Human Resources Planning</td>
</tr>
<tr>
<td>• Undertake better communication with other agencies and review and address laws that impede this inter-agency communication;</td>
<td></td>
<td>Subcriterion 3: Human Resources Development</td>
</tr>
<tr>
<td>• Delegation of authority to middle-management to better empower people in their jobs;</td>
<td></td>
<td>Criterion 3: Knowledge Management</td>
</tr>
<tr>
<td>• Human resources should be more involved with staff in career development and should assist staff in outlining their career paths within the organization</td>
<td></td>
<td>Subcriterion 1: Understanding KM</td>
</tr>
<tr>
<td>• Design a skills development program and link this to the career paths of individuals in the organization</td>
<td></td>
<td>Subcriterion 2: KM Operations</td>
</tr>
<tr>
<td>• Review legal status of email within whole-of-Jordan Government context</td>
<td></td>
<td>Subcriterion 3: Learning Organization</td>
</tr>
<tr>
<td>• Implement a succession planning strategy to maintain key skills within the organization and to preserve key knowledge held within the organization;</td>
<td>People &amp; Culture</td>
<td>Criterion 1: Leadership Subcriterion 2: Supportive Culture Subcriterion 3: Relationship with Stakeholders</td>
</tr>
<tr>
<td>• Identify key groups or communities of practice or special interest groups within the organization and seek Executive mandate to support them;</td>
<td></td>
<td>Criterion 2: Human Resources Subcriterion 1: Human Resources Management</td>
</tr>
<tr>
<td>• Develop an incentives/rewards system for knowledge sharing, skills development and training;</td>
<td></td>
<td>Subcriterion 2: Human Resources Planning</td>
</tr>
<tr>
<td>• Rotate employees throughout the organization so that skills are spread and learning can take place;</td>
<td></td>
<td>Subcriterion 3: Human Resources</td>
</tr>
<tr>
<td>• Recognize the individual achievements of people, particularly where they share knowledge with others to reach these achievements;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of Activity</td>
<td>KM Strategy Element</td>
<td>Related COE Criteria/Sub-Criteria</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Reward knowledge management behavior/best practice in performance assessments, either on an individual or team basis;</td>
<td></td>
<td>Development</td>
</tr>
<tr>
<td>• Explore alternative forms of providing rewards, whether this be monetary (bonus, trips, dinners, etc) or non-monetary (e.g., special awards, recognition ceremonies, etc)</td>
<td></td>
<td>Sub-Criterion 4: Employee Relations</td>
</tr>
<tr>
<td>• Implement on-the-job training and mentoring schemes to assist employee performance and improve efficiency.</td>
<td></td>
<td>Criterion 3: Knowledge Management</td>
</tr>
<tr>
<td>• Identify high performers within the organization and provide them with incentives to share their knowledge and delegate their responsibilities;</td>
<td></td>
<td>Subcriterion 1: Understanding KM</td>
</tr>
<tr>
<td>• Develop ways of overcoming the constraints imposed on recruiting and promoting employees bound by the Civil Service Code;</td>
<td></td>
<td>Subcriterion 2: KM Operations</td>
</tr>
<tr>
<td>• Involve non-technical people in HR management and training committees</td>
<td></td>
<td>Subcriterion 3: Learning Organization</td>
</tr>
<tr>
<td>• Make business processes formal and institutionalized (i.e., consistent throughout the organization).</td>
<td>Process</td>
<td>Criterion 4: Processes</td>
</tr>
<tr>
<td>• Identify parts of business processes where collaboration, decision-making or knowledge sharing/exchange takes place or should occur;</td>
<td></td>
<td>Subcriterion 1: Process Management and Streamlining</td>
</tr>
<tr>
<td>• Describe skills required and knowledge needed to undertake the business processes identified;</td>
<td></td>
<td>Subcriterion 2: Resource Management</td>
</tr>
<tr>
<td>• A business owner should be assigned to each of the processes identified in the organization so that there is responsibility for best practice process and performance;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Break up silo culture by institutionalizing well-documented and well-communicated cross-functional processes, which include activities, roles and responsibilities, decision-making points and knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Map out where key skills and knowledge are held within the organization and provide a Directory of Expertise to all employees within the organization;</td>
<td>Content Management</td>
<td>Criterion 1: Leadership</td>
</tr>
<tr>
<td>• Better utilization and capture of knowledge from external consultants;</td>
<td></td>
<td>Subcriterion 3: Relationship with Stakeholders</td>
</tr>
<tr>
<td>• Establish a platform, either electronic or physical, for external organizations and consultants to exchange experience with the implementation of projects.</td>
<td></td>
<td>Criterion 3: Knowledge Management</td>
</tr>
<tr>
<td>• Create a knowledge repository and provide access to it for everyone within the organization;</td>
<td>Technology</td>
<td>Subcriterion 1: Understanding KM</td>
</tr>
<tr>
<td>• Encourage the use of technology to acquire knowledge and support this via</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of Activity</td>
<td>KM Strategy Element</td>
<td>Related COE Criteria/Sub-Criteria</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>training and awareness-raising;</td>
<td></td>
<td>Subcriterion 2: KM Operations Subcriterion 3: Learning Organization</td>
</tr>
<tr>
<td>• Provide a lively Intranet or database as a collaboration/information tool and get better use out of existing information technology;</td>
<td></td>
<td>Criterion 5: Outcomes</td>
</tr>
<tr>
<td>• Measurement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. **Individual Workshop Results**

6.1 **Jordan Export Development and Commercial Centers Corporation**

**Definitions**
- Each employee knows what he/she needs to know in JEDCO
- Transferring ethics and values into practice – getting an alignment of individual and corporate values
- To share knowledge with others in a managed way
- To acquire skills to do our jobs better
- Vertical and horizontal communication of knowledge via communication, training, job rotation, and succession planning

**Benefits of Knowledge Management**
- More efficient organization that is better able to meet organizational goals
- Organization that can deliver its services faster and better
- No reinvention of the wheel – reuse of knowledge within the organization
- Better performance and better planning

**Vision & Strategy**
JEDCO’s vision is to provide the highest quality services to the Jordanian export community to make Jordan the most competitive country in the region within 5 years.

**JEDCO Objectives (in this order of priority):**
1. Get Jordanian companies to export
2. Contribute to export development in Jordan by providing technical and financial assistance to Jordanian exporters, undertake a national export strategy and administer funds for industry development
3. Provide assistance to Jordanian exporters by organizing trade fairs and missions and coordinate donor agencies
4. To represent Jordanian exporters in the region and in the United States

**Constraints**
- Key people are leaving the organization leaving critical gaps in skills.
- There is no succession planning
- The CEO refuses to delegate responsibility – he insists on signing all official documentation
- The organization is in turmoil – there is no clear direction articulated for the future, there is considerable uncertainty about the future of the organization, including its structure and financing
- There is a prevailing attitude of “knowledge is power” – why should people share knowledge if the future is so uncertain.
- Knowledge hoarding prevails – there are silos in the organization
- Human Resources is not involved in succession planning or in capability planning
- Resources are limited by what the government determines
No adoption of best practice

**JEDCO: High Level Knowledge Map (Listed in Order of Priority)**

<table>
<thead>
<tr>
<th>Source of Knowledge Inputs</th>
<th>Destination of Knowledge Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporters</td>
<td>Exporters, manufacturers, industry associations and chambers of commerce</td>
</tr>
<tr>
<td>Staff, Board of Directors and CEO</td>
<td>Potential importers of Jordanian exports</td>
</tr>
<tr>
<td>Departments of Statistics (local and international – e.g., Eurostats)</td>
<td>Research firms, consultants, government institutions, ministries, university students, international counterparts,</td>
</tr>
<tr>
<td>Government policies/visions – trade agreements, international reports (private and government) and intelligence reports</td>
<td>Ministers, government agencies, donor agencies, exporters from abroad, trade fair organizers</td>
</tr>
<tr>
<td>Jordanian embassies abroad and embassies of other countries</td>
<td>Board of Directors</td>
</tr>
<tr>
<td>Internet and online information sources, and publications from banking and financial institutions</td>
<td>Staff</td>
</tr>
</tbody>
</table>

**Opportunities**

- Committees exist that are empowered to achieve objectives
- There is a move in mindset from a public sector to a private sector organization
- It is possible to map out expertise within JEDCO – who knows what and who needs to know and to link these people
- Mentoring and informal knowledge exchange already occurs within the organization via email and discussions between employees
- There are task force communities of practice that will persist despite the re-organization of JEDCO – this need to be built upon.
- Trading employees will mean there will be new skills brought into the organization.

**Action Items**

- JEDCO needs a succession planning strategy to be put in place in order to maintain key skills and key knowledge within the organization;
- JEDCO needs to identify the key groups or communities of practice within JEDCO and seek Executive mandate to support them;
- JEDCO needs to develop an incentive/reward system for knowledge sharing, skills development and training.

**6.2 Jordan Investment Board**

**Definitions**

- KM is based on people who have the right knowledge to perform their tasks
- KM is a computer system that is used to help people understand what knowledge is in the organization and can be used to retrieve it
- KM is a systematic approach or set of processes within the organization to use and manage both information and knowledge
- KM is all about how to better distribute knowledge either by IT or by other means, to people who have a need to know within the organization.
- Analytical tool to understand what it is that we do and how we can improve it
Benefits of Knowledge Management

- Faster retrieval of information/data leading to better delivery of services to clients and better client satisfaction
- Faster learning
- No duplication of effort
- Better performing staff

Vision

- In five years JIB will be the leading corporation within the region and will be Jordan’s ultimate investment generator
- In five years JIB will be the leading agency in the region that will attract foreign direct investment and domestic direct investment in Jordan

Constraints

- JIB doesn’t have the right people in place to make decision – people are not empowered
- Middle management is a barrier between employees and upper management
- There are no rewards or incentives in place to share knowledge
- There is no communication strategy in place to help employees understand the strategic directions of the organization

Opportunities

- Job rotation for knowledge sharing
- Middle managers to be full empowered

Action Items

- There should be periodical departmental meetings and minutes of meetings should reach upper management
- Include initiatives with owner in a special section as part of minutes of meeting
- Create a knowledge repository and provide access to it for everyone within the organization
- Encourage the use of technology to acquire knowledge and support this via training and awareness-raising
- Create a Knowledge Management Office (KMO) that reports directly to the Minister and Secretary General

6.3 Ministry of Industry and Trade

Vision

- A vibrant ministry that effectively contributes to the economic prosperity of Jordanians through having highly qualified employees who utilize technology in their daily work.
- Shape or create a conducive and enabling environment to achieve a higher sustainable socio-economic development for all Jordanians.
Mission
- Promote industrial development through bilateral commercial agreements and ties
- Applying WTO rules in Jordan
- Protecting consumers
- Quality assurance of food products
- Registering companies
- Protecting competition (local versus foreign)
- Controlling monopolies
- Protecting Intellectual Property Rights
- Maintaining a strategic stock inventory
- Foreign imports

Constraints
- There is no support for informal communities of practice
- CITO structure
- Results of studies and outcomes of committees stay on paper – there appears to be no distribution of these findings
- Findings go into projects that contribute little to MIT objectives
- Leadership vision is not communicated to lower levels – there is little transparency in decision-making

MIT: High Level Knowledge Map (Listed in Order of Priority)

<table>
<thead>
<tr>
<th>Source of Knowledge Inputs</th>
<th>Destination of Knowledge Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry, including Chambers of Commerce &amp; Chambers of Industry</td>
<td>Clients, including citizens, companies, industrialists and the private sector</td>
</tr>
<tr>
<td>Government ministries, including Customs, Ministry of Planning, Ministry of Foreign Affairs and other institutions</td>
<td>Donors and industry and trade related entities</td>
</tr>
<tr>
<td>Jordanian Institutions abroad</td>
<td>Jordanian embassies</td>
</tr>
<tr>
<td>Law firms</td>
<td>Commercial attaches abroad</td>
</tr>
<tr>
<td>Citizens, consumers</td>
<td>Consumer Protection Association</td>
</tr>
<tr>
<td>International Organizations</td>
<td>Staff and upper management</td>
</tr>
<tr>
<td>Staff</td>
<td></td>
</tr>
<tr>
<td>Jordan Investment Board</td>
<td></td>
</tr>
</tbody>
</table>

Action Items
- Encourage communication within the organization – between employees, managers and committees
- Better coordination with other agencies and renewing laws which would be necessary to achieve this
- To bring the importance of knowledge management to the attention of senior management so that they will know the importance of critical pieces of information and report this to all interested parties, both inside and outside of the organization
- Provide a set of incentives and reward systems for employees based on performance and sharing knowledge and information amongst staff
• Delegation of authority to middle management to better empower people in their jobs
• Better communication of the strategic direction of the organization to staff
• Human resources should be more involved with staff in career development and should assist staff in outlining their career paths within the organization
• Create a new Department for Planning and Development within the organization
• Implement on-the-job training and mentoring schemes to assist employee performance and improve efficiency.

6.4 Ministry of Planning

Definitions
• Sharing/transfer of key information and knowledge across the organization
• Gathering, filtering, processing, analyzing, sharing and using knowledge
• A system, mechanism or repository that can search for and retrieve data, information and knowledge across all resources (HR, financial, IT, etc) within the organization
• The right knowledge to the right person at the right time and in the right context to support the right decision.

Benefits
• A better performing Ministry that improves the socioeconomic position of the Jordanian people.

Vision
Shape/craft a conducive/enabling environment to achieve higher sustainable socio-economic development for all Jordanians.

Mission
To be a driving force for guiding and coordinating governmental socio-economic policies, programs and priorities as well as enhancing developing international cooperation for addressing those goals.

Objectives
• Take lead in developing the national social and economic development plan
• Enhance donor relations
• Secure adequate funding at appropriate times for priority development projects
• Serve as liaison between national institutions and donors/international institutions
• Lead negotiations and packaging of loans
• Monitor donor-funded projects to ensure effective implementation
• Facilitate the process for cultural cooperation between Jordan and other nations
• Work with the private sector to enhance Jordan’s competitiveness

Constraints
• People who work only for the paycheck and are not motivated to share knowledge
• Need to get executive buy-in for knowledge management
• No strategic planning – the organization works by crisis management
• There is no human resource planning – there are either people who do not perform or people who need to over-perform in order to compensate for the others
• Staff empowerment is not uniform throughout the organization
• There are no tools to help the Ministry cope with too much information
• Email has no legal status
• There is a lot of re-inventing the wheel and duplicate tasking within the organization
• There is poor communication and often multiple requests from management to do the same work.

Opportunities
• Leverage on high performers within the organization who want to delegate more of their responsibilities
• Use influence of Minister and CEO to get backing for KM-related work

**MOP: High Level Knowledge Map (Listed in Order of Priority)**

<table>
<thead>
<tr>
<th>Source of Knowledge Inputs</th>
<th>Destination of Knowledge Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister, Ministry and Royal Court</td>
<td>Prime Minister and Royal Court</td>
</tr>
<tr>
<td>Non-Governmental Organizations and Donor Organizations</td>
<td>NGOs and Donor Organizations</td>
</tr>
<tr>
<td>Public and Parliament – who demand accountability</td>
<td>Public and Parliament</td>
</tr>
<tr>
<td>Private Sector</td>
<td>Ministry of Planning Staff</td>
</tr>
<tr>
<td>Other Government Departments</td>
<td>Other Ministries</td>
</tr>
<tr>
<td>Ministry of Planning (field work)</td>
<td>Other countries</td>
</tr>
<tr>
<td>Other Countries (including Benchmarking analysis)</td>
<td>Sub-contractors and the private sector</td>
</tr>
</tbody>
</table>

**Action Items**
• Get executive buy-in and commitment for knowledge management and extend this buy-in to middle management and staff
• Ensure there is better communication about the direction of the organization and that people understand the nature and roles they have in their job
• Provide an incentive system (rewards, recognition, etc) to change culture so people embrace knowledge management and get the rest of MoP staff involved
• Provide a lively intranet or database as a collaboration/information tool and get better use out of existing IT
• Undertake a detailed knowledge mapping exercise within the MoP.

6.4 **Customs Department**

• Today, there are about 1400 employees in the Jordanian Customs;
• Customs is geographically spread across the whole Jordan

**Vision**
“In five years the Customs department will be among the world’s best Customs administrations implementing e-Customs operations and providing excellent Customs services.”

- Customs vision has a 100% commitment and support by Customs employees;
- Customs strengths:
  - Very proactive and innovative middle management;
  - IT infrastructure - Customs vision has been aligned with the Customs IT strategy

**Knowledge Management Strategy**
Knowledge Management Strategy has to be aligned with the goals and objectives of the organizations – what does it mean for your organization? What does it mean for you and your day-to-day job activities?

**Future - Shifts to**
Desired future is described by an organization’s vision. What are the attributes of the organization and its culture enabling the vision?

- Excellent;
- Transparent;
- Accountable;
- Leadership – lead by example, empowering employees, no micromanagement;
- Committed and informed employees – this attribute has to come from within the organization, cannot be imposed from the top or from outside;
- There are incentives to become better;
- Motivation;
- Fairness and justice;
- Everybody is involved;
- Everybody’s work is appreciated;
- Collaboration and sharing become the way of doing a job;

**Today - Shifts from – Strategies**
How do we become the organization capable of achieving our vision?

- Differentiation from other departments – currently Customs have 46 different kind of incentives to reward employees;
- Employees’ competence – improvement in that domain would benefit greatly to achieving the vision, this is also perceived as a major shortcoming; there are incentives to train and training is done in a few different ways
  - On the job training
  - Seminars
  - Meeting
- Customs Training Center provides many English, computer and technical job related courses

- Examples of knowledge being power are addressed by:
  - training people,
  - awareness campaign,
  - coaching and mentoring,
  - job rotation - sharing knowledge might lead to getting a better position

- System computerization at Customs enables information spreading and knowledge sharing; examples of this in practice:
  - A list of experts at Customs – any freshmen can look up Customs expertise
  - Case system an example of departmental collaboration between Risk management and Intelligence
  - A database in Aqaba is an example of data sharing between different departments

- There is a strong consensus that innovation and new ideas are supported in Customs, there is strong support from the very top, and anyone can convey good ideas;

- Customs business processes - review of current business processes and documentation – improvement and reengineering will be required to make Customs a more efficient organization; the review should be an ongoing process;

- Certain areas have reward systems linked to an individual’s experience and success,
  - sharing the knowledge and experience would impact on the individual’s income, thus working counterproductively against encouraging culture of sharing;
  - there isn’t any systematic approach to incentives to share and collaborate today;
  - There is effort, within Customs, to build culture where people would feel happy to share – this needs to be explored further;

- Commitment of Customs employees and Customs’ image
  - Some people perceive reward system as not very fair;
  - There is a need to improve image of Customs and its employees, certain part of public might question honesty and integrity of Customs officers, people need to be proud of working for Customs;
  - What does Jordanian Customs do for Jordan?
  - Ask employees about how to improve the image;

- It is difficult to find all necessary job related and decision making information – knowledge mapping might improve that,
• this is an action item on the Customs’ knowledge management strategy plan for 2004;

• Connecting people, either internal or external to Customs, with similar technical skills or similar jobs, e.g. border directors met first time ever only recently, or interested in the same piece of information, e.g. intelligence activities, evaluation
  o there could be a significant benefit to Customs if such knowledge and experience exchanges happen on a more regular basis;
  o supporting informal communities;
  o technology might help a lot to foster such communities

• Documenting successes, capturing experience and processes leading to the success; adding a step in a process to document or to report or to inform of a success,
  o e.g., uncovering an attempt to smuggle certain goods at the border reported to all border operations that my benefit from such knowledge, might improve that – finding ways how to achieve that in a geographically spread organization

• Major forces working against achieving the vision:
  o Civil service recruitment, regulations and promotion processes

• More autonomy in budgeting and recruitment is required;
• There is a theme running in Customs each year, 2003 was year of the Total Quality Management; a proposal to have 2004 as the year of Customs knowledge sharing

Knowledge flows
• Inputs
  o Private sector,
  o Other Government Agencies,
  o Passengers,
  o Citizens
• Supporting core business
  o Trade facilitation
  o Compliance
• Outputs
  o Trade statistics,
  o Income Tax and Sales Tax,
  o Revenue collection,
Knowledge Management Strategy – Workshop Outcomes

- Compliance,
- Policies

Knowledge Assets
- The most important knowledge assets in Customs
  - Customs experts, employees and their knowledge,
  - Client data – all we know about our clients to support Customs major objectives – smooth trade facilitations and compliance
  - procedures, databases, rules and regulations, training programs

- E-Customs – communication and information dissemination supported and enabled electronically;
- Classify jobs on basis of what kind of information is necessary to perform the jobs, e.g. help desk – using structured explicit knowledge; management - problem solving - more improvisation is necessary;
- There is a good understanding in Customs that there is no straight forward transfer of implicit knowledge into explicit while keeping its value - value of explicit knowledge can only be expressed within a certain context

Recommended Activities
- Business Processes – make them formal and institutionalized
  - Identify parts in a process where collaboration, decision making or knowledge sharing and exchange should occur
  - Identify knowledge flows, knowledge assets and expertise along the business activities flows
    - What do I need to know to perform the task?
    - Where do I get it from? Who do I need to talk to?
    - Who should know about what I just have done?
    - How should I document what I have done?
    - Where should I store the experience?

- Based on the processes and expertise identified – describe the jobs and their skill and expertise requirements
  - Design skill development programs and link them to the career path for employees – Individual development plans designed and progress reviewed by an employee and the employee’s manger,
  - Human Resources policies and recruitment need be to adjusted to support Customs’ vision
- Reward knowledge management behavior in performance assessment
Knowledge Management Strategy – Workshop Outcomes

- Evaluate different ways of rewards
  - Team rewards as opposed to individual rewards
  - Rewards given on the basis of peer assessment

- Document, review and understand better knowledge flows external to Customs;
  - What agencies do Customs communicate with?
  - Who do Customs need to exchange information with?

- Establishing and supporting interest groups and special awards for the best sharing team and best practice implementation;

6.5 Telecommunications Regulatory Commission

The Telecommunications Regulatory Commission (TRC) has about 100 employees. It is a centralized organization with its entire staff located in one place in Amman.

TRC consists of:
- Regulatory (now 12 will be 35 by the end of the year) and Economics departments – most of the knowledge is concentrated in these 2 departments
- Technical department
- Spectrum management
- Operations department
- Administrative support department
- Financial department
- Legal department
- Internal audit group

Vision
A telecommunications environment that is competitive, advanced, regulated and available to all.

Mission Statement
To ensure the availability of advanced and high quality Information and Communications Technology (ICT) services to all users at just, reasonable, and affordable prices by working with all stakeholders in an independent, open and transparent manner to create a regulatory environment that promotes fairness, competition and investment, thus assuring fulfillment of the Kingdom’s long-term ICT needs.

Knowledge Management Strategy
Knowledge Management Strategy has to be aligned with the goals and objectives of the organizations – what does it mean for your organization? What does it mean for you and your day-to-day job activities?
**Today - Shifts from – Strategies**

- Since TRC is a regulatory agency it needs to ensure that:
  - There is an operator providing service
  - TRC was fair in the process of evaluation and fair during the decision making
  - That the decision process was transparent and the rules were followed
  - All parties involved have been consulted
- To ensure that processes are clear
- To ensure a high quality of services provided by the department

TRC engage on average about 30 consultants per year in short and long term projects.

**Major tasks ahead:**

- 2004 is going to be a significant year for TRC because of the mobile phone market deregulations; and
- 2005 fixed line market deregulation is planned.
- To cope with the significant increase in workload, TRC is planning a considerable growth in size and there is an expectation that the number of employees will increase to 150 from current 100 by the end of 2003.
- New staff ramp up period has to be addressed
  - Knowledge maps could be used as a very helpful tool to ease the induction period for new recruits

- Human resource development responsible for training
- There is also human resource management, as well
- It is a government requirement that each position is described before it is filled
- Core departments - provide advice on core business
- Number of people will jump from 20 to 50
- The goal of Knowledge Management strategy is sharing knowledge between management and staff, public and other organizations in efficient, timely and optimal way
- What products do you create?
  - Regulations
  - Produce and maintain licenses
  - Provide opinion and advice
  - Set Service quality criteria
• TRC use a lot of external consultants to provide expertise in and advice on specific technical issues
  o Knowledge exchange between external experts and TRC is not systematic
  o Having a counterpart/understudy to the ECs
  o Knowledge transfer should be a part of the engagement for the ECs
  o Better transparency and reporting of the work ECs

• Sharing and capturing knowledge acquired at conferences is not systematic
• A nice act of communications - World Telecom Day – TRC published a report for general public about their activities
• Process about making rules and guidelines is missing
• Work at TRC is very operationally focused
• A steering committee to monitor all KM initiatives is required
• Understanding organizational values and ethics among all employees
• Improve communication channels both vertical and horizontal
• What needs to change
  o Better communicational channels – cross functional and vertical
  o Better focus on corporate values that affect peoples behavior
  o Transparency – a lot of work is confidential prior to release on a particular date; there need to be clear and documented guidelines, procedures and processes about transparent behavior
  o Faster and accurate decision making
  o Consistency of outputs
  o Better quality of service to increase customer satisfaction
  o Achieving commitments to the vision and mission statements at all levels in the organization, including the senior management
  o Documenting operations procedures

• The type of work is mostly cross functional
• A new performance appraisal scheme is being developed
• Redefined psychological content of the organizational structure, e.g. relationship between management and employees
• How could we observe that knowledge management is happening in the organization?
  o Faster and more accurate decision making process
  o Less complaints
  o The same job can be assigned to different people while preserving the quality of output
  o Increase in staff efficiency
Employee job satisfaction improved
Increase the quality

- Improvement of industry in general can be a measure of TRC doing job right

**Knowledge flows**
- Inputs
  - External consultants
  - Research – a task force giving research tasks
  - Attending conferences abroad

- Where is all the information stored
- Regulated environment just established
  - Customers
  - Licensees – operators – communication is rare
  - Customers – consumers – complaints, asking for instructions
  - Government entities
  - Potential investors

**Knowledge Assets**
- There used to be a monthly newsletter at TRC publishing major events and activities, training courses
- A job description and set activities for each of the positions at the department is being created
- There is going to be an electronic library set up for internal use
- FAQs on the web site – not monitored, most asked questions can be received from the call center

**Recommended Activities**
- A training plan and a knowledge map to keep the ramp up period for the new employees short
- Renew publishing of the newsletter
  - A communication of successes in KM, conferences,
  - Communities of common interests

- Documentation of business processes and knowledge flows and understanding decision making points are very needed
  - A owner assigned for each process to manage documentation and streamlining
Internal people could be trained to perform this activity

- Better utilization and capture of knowledge from external consultants

6.6 Jordan Institution for Standards and Metrology

- JISM has about 190 employees. Most of the people in the organization are engineers.
- JISM services can be divided into two main groups, mandatory or voluntary services, where JISM competes with other organization.
- JISM strengths:
  - Very proactive and innovative KM group;
  - JISM has already prepared a Knowledge Management Strategy, where JISM’s objectives have been linked to particular activities.

**Vision**

“JISM is distinguished on the national, regional and international levels as a center of excellence in the area of standardization and related fields for:

- Its commitment to applying internationally accepted best management and technical practices.
- Its quality of services and products and responsiveness to the needs, expectations and requirements of the economic sectors and consumers.

Thus, positively contributing to ensuring the safety and well being of the society as well as to the enhanced competitiveness of the national economy in keeping with the national objectives and our core values and contributes to their achievement within the set priorities.”

**Knowledge Management Strategy**

Knowledge Management Strategy has to be aligned with the goals and objectives of the organizations – what does it mean for your organization? What does it mean for you and your day-to-day job activities?

**Today - Shifts from – Strategies**

- There was a survey conducted among employees in the department “What do you think of others?”
- Employees tend rely on managers for setting instruction directions.
- Many people feel unsafe in their positions because of plans to transfer employees hired before 1995 or letting them retire, many senior people would fall into this category – new retirement policies have been put in place recently.
• Continuity management appears to be a problem, inflexible hiring policies
• There a lot of committees in JISM, which could benefit from bon technical staff being involved
• KM committee – all members are from the technical part of the JISM
• Constraints in achieving the KM objectives:
  o Cross divisional collaboration and teamwork is not always appreciated by the middle management
  o Knowledge is power – unwillingness to share
  o Micromanagement
  o Functional silos
  o Perceived value of different parts of the department, technical positions are perceived as having a higher value
  o Continuity management
• Civil services recruiting policies are in issue, it is difficult to get people who are really wanted
• Director general considers the teamwork is more important than individual work, yet the middle management fails to implement this
  o Currently there are means to feed suggestions back to a committee chaired by the Director General, good suggestions are rewarded by the DG
  o Current mindset is, however, holding employees back from going directly to the DG
• There is a need to create knowledge maps and mapping the processes, including knowledge flows in between process steps
• A Cultural day – all employees are invited to that day and selected employees get recognized by the DG for good work; this happens annually

Future - Shifts to
Desired future is described by an organization’s vision. What are the attributes of the organization and its culture enabling the vision?

• We want to a be a learning organization in 12 months time
  o Learn from previous experience and from mistakes of others

• New services provided to Industry as a part of knowledge management
  o One new service for each department, there are 8 operational departments, 8 new services from the next year
• Regular meeting with senior people
• Recognized and appreciated team work and cross divisional collaboration
  o Monthly report exchanges among divisions

• There is a plan to implemental technology – document management system

Knowledge flows
• Inputs sources
  o International organizations
  o Industry
  o Traders
  o Labs
  o Cert bodies
  o Service providers
  o Staff
  o Board of Directors
  o Other government agencies

• JISM provides outputs to users are the same set of organizations

Recommended Activities
• Make people feel more important, a part of the whole, especially non-technical staff to increase performance, efficiency and effectiveness
  o Include non-technical people in HR and training committee, Environmentally friendly department committee

• Incentives for sharing knowledge to increase loyalty, better sharing of tacit knowledge, continuity in organizational performance
  o Career path
  o Recognition of knowledge sharing and recognition of not sharing
  o Knowledge sharing as a part of performance appraisal

• Documenting cross divisional processes including knowledge flows supporting decision making steps

6.7 Ministry of Information and Communications Technology
• There are 50 employees in MoICT, centrally located
• 20 people were kept from a traditionally run department and the core team of the Project Management Office (PMO) was imported from EDS in the United States without looking at the rest of the Ministry
• There are certain privileges, such as recruitment, given to MoICT that have not been replicated across other departments
• There is an expectation that only the think-tank part of the current department will remain in the future, eGovernment will become a separate department

MoICT Vision Statement
"An Information and Communications Technology Sector in Jordan in which the market is given the widest possible scope to contribute to improved services and to the economic growth of the country." It is the policy of the Government of Jordan to give the Information and Communications Technology (ICT) market incentive to contribute significantly to economic and social development by creating the legal, institutional, and commercial environment in which the ICT market is nurtured, grown, and sustained.

Today - Shifts from – Strategies
• It is clear to MoICT where their strengths and weaknesses are
• MoICT services:
  o Set policies in information and communication technology
  o Start initiatives and become a in initiative champions
  o Improving education, stations in rural areas, setting up networks
  o Produce policies, guidelines, standards and awareness/education in ICT industry
  o Advise on change management issues
  o Identify project champions and establish cells in different departments

• Implementation of projects lies within other departments
• Core expertise
  o project management,
  o change management,
  o policy making and strategy,
  o ICT and security expertise,
  o ICT promotion, communication and media

• Processes, procedures and roadmaps already established within MoICT
• Setting up a program management office
• Ministry can be looked upon as two parts – ministry as a whole and the PMO for eGovernment
• eGovernment PMO perceives itself as a great success and as the best practice and there is a view within the department that its success should spread better into the rest of the ministry
• The department believes they can do better they can do more
• The top management sees MoICT as perfectionists by nature
• There is a lack of resources within the department
• There is a large repository of documents and processes and procedures on the shared intranet
• There are many external consultants advising on policy issues
• There many initiatives, training programs and established centers to communicate with rural areas
• MoICT conducts work for eight other departments, and the program covers many other departments
• Many activities are happening within the department but not all are institutionalized
• How to create more understanding, and how to create a better culture of sharing
• How to become a learning organization
• Human resources is the biggest problem in whole of public sector
• PMO provides:
  o Project management (PM) methodology and set of tools for the methodology,
  o Setting up eGovernment project organization structures in other departments
  o Providing PM expertise throughout the eGovernment projects in other departments
  o a change plan and oversee that all appropriate teams and structures are in place before the project starts

**Future - Shifts to**
• Effective succession planning – identify key people and key expertise and prepare a formal plan to ensure succession
• Intention to have well-documented and well-communicated goals of the department to the stakeholders
• Institutionalized meeting with external stakeholders
• A plan to engage external consultants to set up an IT system to capture experience from the implementation of eGovernment projects
• Streamlined communication with other departments – cross organizational processes
• Improving communication within the department and with other departments
• Roles and responsibility need be more refined
- Define business processes with activities, roles and responsibilities and knowledge inflows and outflows for each of the steps and decision making points
- Define and document cross functional processes to break functional silos

**Knowledge flows**

**Inputs:**
- External consultants
- Research
- Internal experts

**Outputs**
- Policies
- Guidelines
- standards and
- awareness/education

**External stakeholders:**
- Citizens
- Other government agencies
- Rural areas
- Private sector

**Recommended Activities**
- Establish a platform, either electronic or physical meetings, for organizations where MoICT is involved in supervising eGovernments to exchange experience with the implementation of the projects
- Streamline and formalize knowledge exchange, collaboration and communicating with other departments
- Break up silo culture by institutionalizing well documented and well communicated cross-functional processes, which include activities, roles and responsibilities, decision making points and knowledge inflows and outflows
Annex 1: COE Knowledge Management Criteria

**Criterion 1: Leadership**

*Sub-Criterion 1: Strategic Planning Framework*
- Factor 1: Vision
- Factor 2: Mission
- Factor 3: Strategy

*Sub-Criterion 2: Supportive Culture*
- Factor 1: Values
- Factor 2: Learning Organization
- Factor 3: Leading by Example
- Factor 4: Staff Empowerment

*Sub-Criterion 3: Relationship with Stakeholders*
- Factor 1: Key Stakeholder Identification
- Factor 2: Maintaining Trust and Managing Expectations of Key Stakeholders
- Factor 3: Coordination with other Organizations

**Criterion 2: Human Resources**

*Sub-Criterion 1: Human Resources Management*
- Factor 1: Employment Policies
- Factor 2: Reward and Compensation Policies
- Factor 3: Salary Administration
- Factor 4: Performance Appraisal

*Sub-Criterion 2: Human Resources Planning*
- Factor 1: Forecasting
- Factor 2: Succession Planning

*Sub-Criterion 3: Human Resources Development*
- Factor 1: Employee Training and Development
- Factor 2: Learning/Organizational Culture

*Sub-Criterion 4: Employee Relations*
- Factor 1: Employee Retention
- Factor 2: Employee Welfare

**Criterion 3: Knowledge Management (KM)**

*Sub-Criterion 1: Understanding KM*
- Factor 1: Key Features, Roles and Benefits
- Factor 2: Knowing and Valuing the Organization’s Knowledge Assets

*Sub-Criterion 2: KM Operations*
- Factor 1: Creating/Capturing Knowledge
- Factor 2: Sharing Knowledge Internally
- Factor 3: Using Knowledge Internally
Factor 4: KM Performance Targets/Reviews  
Factor 5: e-Government

**Sub-Criterion 3: Learning Organization**  
Factor 1: Understanding What is a Learning Organization  
Factor 2: Supportive Culture, Systems and Systems Architecture

### Criterion 4: Processes

**Sub-Criterion 1: Process Management and Streamlining**  
Factor 1: Process Design and Delivery  
Factor 2: Process Review/Documentation  
Factor 3: Streamlining of Procedures

**Sub-Criterion 2: Resource Management**  
Factor 1: Financial Resources  
Factor 2: Human Resources  
Factor 3: Material Resources  
Factor 4: Technological Resources

**Sub-Criterion 3: Customer Relationship Management**  
Factor 1: Customer Needs and Requirements  
Factor 2: Customer Satisfaction  
Factor 3: Continuous Improvement and Value Added

### Criterion 5: Outcomes

**Sub-Criterion 1: How Organization Contributes to National Goals**  
Factor 1: Understanding National Goals  
Factor 2: Understanding Impact of National Goals  
Factor 3: Understanding and Coordinating Joint Impacts  
Factor 4: Identifying and Managing Key Risks to Achieving Goals

**Sub-Criterion 2: Actual Contribution to National Goals**  
Factor 1: Organization’s Achievement of Output Targets  
Factor 2: Achievement of Related National Goals  
Factor 3: Assessing Output’s Contribution to National Goals

**Sub-Criterion 3: Culture of Enhancing Organization’s Contribution to National Goals**