

Knowledge Management (KM) within Government Administration

Study Report 2003-2004

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October 2004

Introduction

BACKGROUND TO THE STUDY

Since the late nineties Governments have become accustomed to hearing and using the new term “knowledge management” (KM). While no one seems to agree on its definition, everyone agrees on the need to manage knowledge. Perhaps this is because, despite massive investments in ICT and in automation of operational processes, there has been limited progress in using existing and new information to create knowledge and sharing it among Government officers. The goal is clear, but Governments are trying to reach it in different ways.

GENESIS AND CONDUCT OF THE STUDY

In April 2003, the ICA issued a call for participants in a Study Group on Knowledge Management within Government Administration.

The declared aim of the Study Group was to share knowledge about “KM within Government Administration” in order to guide ICA members in their own policy-making on KM. The Study Group was to ask ICA members to contribute information in the following domains:

- KM policies and strategies
- Organisational measures in place in support of KM
- Budgeting specific to KM in Government
- Collaborative systems in use within Government administration
- Systems for the handling of official electronic Government records
- Systems for management of Government content on an enterprise basis
- Systems for acquisition of knowledge from outside Government and for its storage and sharing among Government officers
- Systems for the transfer of competencies between Government officers
- Initiatives and incentives for knowledge sharing between Government officers
- Measures of the success of KM initiatives

The intention was for Study Group participants to contribute their knowledge directly and for a questionnaire to be sent to all ICA Member Countries to capture information about the KM

situation across the board. The approach was intended to be pragmatic and to focus on what is actually happening in this field, rather than on what should or could happen.

Dr Hugo Agius Muscat, currently Head of Knowledge Management in the Office of the Prime Minister, Malta, accepted the ICA Board's invitation to coordinate the Study Group.

The response to the call for participants was limited. In particular, National Representatives did not show interest in forming part of the Study Group. This made the organisation of meetings (typically combined with the Annual ICA Conference or other ICA meetings) very difficult.

Eventually, in consultation with the ICA Board, it was decided to proceed with carrying out a survey among ICA Members on the subject of the Study. The Study Questionnaire (Annex A) was sent to all ICA National Representatives on 27 May 2003. Completed questionnaires were received between 28 May and 17 July 2003 from 10 ICA Members (see Annex B for list of respondents).

A second call for participation in the Study Group was made during the 37th Annual ICA Conference in Tallinn in September 2003. The response was again very limited. Since the critical mass to form a Study Group was not reached, it was decided to limit further activity to documentation of the material received in response to the Study Questionnaire.

Following a suggestion made by a member of the ICA Board, the author invited ICA National Representatives to contribute reports and case studies on KM activities in their Governments that could form part of the Study Report. Relevant responses were included in this document.

The author has also included a list of URLs related to the software companies, applications and products specifically mentioned in the report, as well as a selection of references to material available online of interest to KM practitioners in the public sector.

Knowledge Management is definitely here to stay. The initial management hype and semantic confusion that surrounded KM are now dying down and giving way to steady efforts by organisations across the board to establish communities that learn and share knowledge. This report is in itself a knowledge sharing exercise that may lead practitioners to learn more about KM approaches and experiences in several countries, thus supporting the original declared aim of the study: provision of guidance for KM policy-making in Government.

KM within Government Administration: Survey Findings

In May 2003, a questionnaire was sent to all ICA National Representatives (Annex A). Ten ICA Members returned a completed questionnaire (see Annex B for a list of the respondents). In this section, the findings of this survey are presented.

USE OF THE TERM “KNOWLEDGE MANAGEMENT”

ICA Members were asked whether their Government used the term “knowledge management”, if so, what its definition was, and if not, what related terms were preferred in their country.

The term “knowledge management” was reported in use by the governments of Austria, Australia, Canada, Switzerland, Malta, the Netherlands and Singapore.

Israel and the European Commission reported not using this term.

Definitions given of the term “knowledge management”

Australia defined KM as “a meta-disciplinary approach to improving organisations through the strategic use of their people, processes, content and technology to build organisational capability and culture”.

Austria defined KM as “relations between data and the capacity to represent information”.

Canada commented that there is consensus among federal KM practitioners of what KM is but that there is no standard definition. The Interdepartmental KM Forum defines KM as “a multi-disciplinary approach to using and managing organizational knowledge that is based on sound information management practices, focussed on organizational learning, recognizing the contribution and value of employees, and is enabled by technology. It is primarily concerned with the content of knowledge within the organization and how that knowledge can improve organizational performance”.

Finland explained that there is more than one term in Finnish referring to KM. The English term itself (KM) is also used. The understanding of the content and coverage of KM varies.

Malta defined KM as “the management of systems for the creation, acquisition, sharing, transmission and storage of knowledge.”

The **Netherlands** defined KM as “the management of knowledge, experience, skills and attitudes”.

Norway defined KM as “the right knowledge at the right time to the right people [at] the right cost.” The perspective is holistic: strategy, content, technology, processes, organization (culture) and incentives, relations, integrated services.

Singapore defined KM as “a knowledge rich environment to strengthen active and collaborative learning and sharing of knowledge across the Public Service so as to improve responsiveness through the exploitation of Infocomm”.

Switzerland and the European Commission did not give an official definition.

KM-related terms preferred in some countries

Although the question about alternative terms was meant for countries that do not use the term KM, ironically it was two countries that do use the term KM that suggested a number of alternative terms:

Canada:

- knowledge transfer
- knowledge translation
- knowledge mobilization
- knowledge sharing
- innovation
- information management

Norway:

- horizontal learning
- knowledge networks

Australia noted that while some of the organisations forming part of the Government had embraced KM practices, others were conducting similar work but calling their process by a different name to KM. Whole-of-Government frameworks and programs for which the National Office for the Information Economy had primary carriage generally did not use the term KM. Other similar terms used were information management, e-government and interoperability.

The **European Commission** replied that the use of the term “content management” was preferred.

FORMAL GOVERNMENT KM OR KM-RELATED POLICY AND/OR STRATEGY

ICA Members were asked whether their Government had a formal KM or KM-related policy and/or strategy.

At the Commonwealth Government level **Australia** has several related policies/strategies, and provided the following references:

Better Services, Better Government: The Federal Government's e-Government Strategy

www.noie.gov.au/publications/NOIE/better_services-better_gov/index.htm

[Updated URL: www.agimo.gov.au/publications/2002/11/bsbg/task]

Australian Government Use of Information and Communication Technology: A New Governance and Investment Framework

www.apsc.gov.au/mac/technology.htm

Interoperability Framework

[www.noie.gov.au/projects/egovernment/Better_Practice/InteroperabilityFramework.htm]

[Updated URL: www.agimo.gov.au/practice_framework]

Interim Standard on Knowledge Management (Standards Australia International)

www.knowledge.standards.com.au/

Canada replied that there is an Information Management (IM) focus at government-wide level, and a KM focus in various departments. There are various policies that relate specifically to the disciplines that underpin KM, including IM, Continuous Learning, HR Administration, as well as various other governmental initiatives that relate to KM, such as Modern Comptrollership/ Management Accountability Framework and HR Modernization (legislation).

The following references were provided:

Policy on the Management of Government Information

www.tbs-sct.gc.ca/pubs_pol/ciopubs/TB_GIH/mgih-grdg_e.asp

Policy for Continuous Learning in the Public Service

www.tbs-sct.gc.ca/pubs_pol/hrpubs/tb_856/pclpsc-pacfp_e.asp

Framework for Management of Information

www.cio-dpi.gc.ca/im-gi/fmi-cgi/fmi-cgi_e.asp

Management Accountability Framework/Modern Comptrollership

www.tbs-sct.gc.ca/maf-crg/index_e.asp

HR Modernization

www.hrma-agrh.gc.ca/hrmm-mgrh/index_e.asp [updated URL]

Shared Systems Initiative

www.cio-dpi.gc.ca/ssi-isp/index_e.asp

Finland replied that there was no formal policy/strategy, but that there were strategies for different areas of KM. The Government had decided to start the planning of the KM strategy, but no timetable had yet been set.

Details of Finland's approach to Knowledge Management were provided by means of a copy of a paper presented by Maija Jussilainen at an OECD Symposium held in February 2003. This has been reproduced in full as Annex C.

The **Netherlands** replied that it has a formal policy/strategy. (This is only available in Dutch.) A reference was provided to a page on the website of the Ministry of the Interior and Kingdom Relations (www.minbzk.nl).

Norway replied that it has a formal policy/strategy. The following reference was provided:

<http://europa.eu.int/ISPO/ida/jsps/index.jsp?fuseAction=showDocument&documentID=884&parent=chapter&preChapterID=0-140-194>

This URL led to a news item on the Europa IDA website about the Strategy for ICT in the Norwegian Public Sector 2003-2005. The English summary on this Strategy, available from a link on this web page, refers to KM in the Strategy as follows:

Knowledge management is in this context defined as identification, development and dissemination of knowledge critical for agencies. This should be strengthened by systematically developing the learning and knowledge network both within and across sectors as an instrument for promoting the goals of the modernization programme.

ICT has an important role to play in achieving this. A pilot project is therefore proposed for an ICT-based network for knowledge management. The goal of the project is to extend the scope to embrace other parts of the public sector on the basis of the results. It is proposed that the established network for 'reference municipalities' shall be one of the pilot projects. This network is a part of the modernization programme.

Although **Switzerland** replied that it did not have a formal KM strategy, there were policies and standards underlying several of the mentioned IT aspects of KM. The following references were provided:

www.isb.admin.ch/internet/gever

www.isb.admin.ch/internet/architektur

www.isb.admin.ch/internet/strategien/01483/

Singapore and the **European Commission** replied that they have a formal KM-related policy/strategy, but that this is not in the public domain.

Finland, Japan, Malta and Israel replied that they do not have a formal KM policy or strategy.

COVERAGE OF SPECIFIC I.T. ASPECTS OF KM

ICA Members were asked whether their formal KM or KM-related policy/strategy covered one or more of the following I.T. aspects of KM. The replies were as follows:

	Australia	Canada	Netherlands	Norway	Singapore	Switzerland	European Commission
Electronic Records Management	Yes	Yes	Yes	Yes	Yes	Yes	No
Enterprise Content Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Software to support collaboration	Yes	<i>Note 1</i>	Yes	Yes	Yes	No	No
e-Learning	No	Yes <i>Note 2</i>	Yes	Yes	No	No	No
Common data/file repositories	Yes	Yes	No	Yes	Yes	No	No
Corporate data architecture standards	Yes	Yes	Yes	Yes	No	Yes	Yes

Note 1: "There have been several individual initiatives but no [single] endorsed Government of Canada approach, e.g. Treasury Board Secretariat and Public Works & Government Services collaborative websites."

Note 2: "This is being done selectively within departments, and a cross-government pilot is being run presently."

*Summarising these findings, it is seen that **Enterprise Content Management** was covered in the policies of all the eight respondents to this question, testifying to its perceived criticality in Government KM. It was followed closely by **Electronic Records Management** (7 positive*

replies), which is hardly surprising considering the importance that is attached by Governments to official records as a repository for organisational knowledge, and **Corporate Data Architecture Standards** (7 positive replies, too). **Common repositories and collaborative software** also figured highly as components of formal KM or KM-related policies/strategies, with 6 and 5 positive replies respectively. **E-Learning** only figured in three out of the eight responses.

LEAD RESPONSIBILITY FOR KM INITIATIVES IN GOVERNMENT

ICA members were asked whether there is a person in their Government with lead responsibility for KM initiatives.

In **Australia**, the Chief Executive Officer of the National Office for the Information Economy (NOIE) was identified as the person with the lead responsibility for KM.

Japan replied that each ministry had a responsibility for KM in its area in charge.

In **Malta**, the lead for KM came from the Head, Knowledge Management and Communications, in the Central Information Management Unit in the Office of the Prime Minister.

In the **Netherlands**, several persons working in the Department of the Interior had lead responsibility for KM.

In **Norway**, lead responsibility lay with a Project Manager working in the Royal Ministry of Labour and Government Administration.

In **Singapore**, the Director Central Services in the Ministry of Finance was the lead person.

In Austria, Canada, Finland, Israel, Switzerland and in the European Commission no single person was identified as having lead responsibility for KM initiatives.

Since the survey was held, the situation has evolved in a number of countries. For example, it is seen from the following link that in the Government of Singapore there is a Chief Knowledge Officer: http://app.sgdi.gov.sg/listing.asp?agency_subtype=dept&agency_id=0000003135

Note that in Australia the NOIE was replaced by the AGIMO (www.agimo.gov.au).

GOVERNMENT BUDGETS FOR KM

ICA members were asked whether their Governments had budgets specifically devoted to KM, and how large the total budget was in absolute terms and in relation to the total ICT budget.

Canada replied that its Government has KM budgets at departmental level. Figures on the level of departmental investment or the total investment were not available.

The **Netherlands** replied that its Government had a budget for KM but this is distributed over several organisations and topics, and is not aggregated as such.

Norway replied that its Government had a budget of 5 million NOK [around 0.7 million USD] devoted to KM for the period from June to December 2003.

Singapore replied that its Government had a KM budget of 270 million SGD [around 150 million USD], which constituted 18% of the total ICT budget.

Austria, Finland, Israel, Malta and Switzerland replied that their Governments did not have budgets devoted specifically to KM. The reply from the European Commission (which is not a Government) was the same.

The aim of the above question was to probe whether jurisdictions considered KM highly enough to devote specific budgets to it. In practice, only a handful of governments were in a position to declare specific budgets at the time of the survey.

SOFTWARE APPLICATIONS USED FOR COLLABORATIVE FUNCTIONS

ICA Members were asked what software applications were predominantly used by their Government for email, discussion, instant messaging, calendaring and library. The following were the detailed responses given, country by country:

EMAIL & CALENDARING

Australia: MS Outlook, Lotus Notes

Austria: MS Exchange/Outlook

Canada: MS Outlook (email & calendar), Lotus Notes (email)

Finland: MS Exchange, TeamWare, Lotus Mail

Israel: MS Exchange/Outlook, Lotus Notes

Japan: Government decided a protocol for the use by each ministry of Lotus, Microsoft and other domestic products.

Malta: TeamWare

Netherlands: Customised MS Outlook-based solution

Norway: MS Outlook

Singapore: Lotus Notes

Switzerland: MS Outlook

European Commission: MS Exchange/Outlook

The replies for Email and Calendaring were considered together as, in the great majority of cases, the same product was in use for both domains. It was clear that the market was dominated by two vendors: Microsoft and IBM/Lotus. The only other product mentioned was TeamWare, which is used in Finland and Malta. (At the time of writing, Malta is planning to migrate from TeamWare to Microsoft Exchange).

DISCUSSION

Australia: Eziboard, Lotus Notes, MS SharePoint

Austria: MS Project

Canada: Listserv, Simplify, Sitescape, Orchestra

Finland: In the Government-wide Intranet, technology by WM-data.

Israel: Not believed to be used extensively

Japan: Government decided a protocol for the use by each ministry of Lotus, Microsoft and other domestic products.

Malta: Very limited use (formerly Teamware Forum)

Netherlands: Through dedicated Government intranet

Norway: Not in place

Singapore: Lotus Notes/Domino

A range of products was reported as being in use for Discussion. No single product appears to dominate.

INSTANT MESSAGING

Austria: Unified Messaging Service [Telekom Austria]

Israel: MS Windows Messenger, Lotus Notes, ICQ

Japan: Government decided a protocol for the use by each ministry of Lotus, Microsoft and other domestic products.

Norway: Cell phone

Other respondents did not specify the use of any instant messaging software.

At the time of the survey most of the respondent governments clearly attached little importance to instant messaging functionality on an institutional basis.

LIBRARY

Australia: Most major applications are in use

Austria: Intercom

Canada: Amicus

Finland: PrettyLib (there was a project for a common PrettyLib Library, but only some ministries participated), Trip, Voyager.

Israel: Aleph, Sapir

Japan: Government decided a protocol for the use by each ministry of Lotus, Microsoft and other domestic products.

Malta: Teamware Library

Netherlands: Various applications, depending in purpose and field

Singapore: Lotus Notes/Domino

European Commission: Own development.

In the case of Library software, the responses revealed a wide range of software applications in use, with significant variation within and between countries.

DIRECTORY

Australia replied that a range of X.500/LDAP products is in use.

Austria: Intercom

Canada: X.500

Finland: (in progress)

Israel: MS Active Directory, Novell NDS [eDirectory], Novell DirXML

Japan replied that the Government had just decided on a protocol for the use by each ministry of Lotus, Microsoft and other domestic products.

Malta: TeamWare Directory

Netherlands: Various applications, depending in purpose and field

Singapore: Lotus Notes/Domino

Switzerland: MS Active Directory, LDAP

Norway and the European Commission did not specify any directory products.

Again, there were wide variations between countries. Unsurprisingly, standard X.500 and LDAP products were repeatedly reported, as was Microsoft's Active Directory, but there were also other products.

The main purpose of the above set of questions was to determine whether patterns were emerging across Governments in the use of software that supports collaboration among knowledge workers. In practice, apart from email and calendaring, it is evident that there is great variety in the software application base, with many smaller-name products being used in several jurisdictions, especially for the Library function.

SOFTWARE APPLICATIONS USED TO HANDLE AND STORE OFFICIAL ELECTRONIC GOVERNMENT DOCUMENTS

ICA Members were asked what software applications were predominantly used by their Governments for the handling and storage of official electronic Government documents (e.g. MS SharePoint, Lotus Notes/Domino, Documentum, Hummingbird, FileNet ..., other)

Australia: MS SharePoint, Lotus Notes/Domino, and a range of others.

Austria: The Intercom system

Canada: The federal Government of Canada has established the Records, Document and Information Management System (RDIMS) as the endorsed system within its Information Management domain. RDIMS consists of the Hummingbird DM 5.0 which addresses document management and either of iRIMS (Open Text), Foremost (Documentum), DocsRM (Hummingbird) to address records management functions. In addition there are several departments that have invested in the Lotus Notes e-mail/collaboration system, which are using Domino.doc and iRIMS to address the handling of their electronic records.

Finland: Documentum (only for EU documents; for other documents there was as yet no common application). Ministries had their own applications: Lotus Notes/Domino, FileNet Panagon, Open Text LiveLink, Documentum.

Israel: Lotus Notes/Domino, minor usage of FileNet and Mobious, MS SharePoint. A cross-Government bidding had been started for an integrated government solution, where companies like Documentum, FileNet and others were good candidates.

Japan: Government decided a basic specification for exchange of data between ministries.

Malta: Range of MS products

Netherlands: Various systems, depending on the government organisation and purpose. A joint study into the use of an MS SharePoint-based solution is currently undertaken.

Norway: DocuLive

Singapore: MS SharePoint, Hummingbird EIP, Lotus Notes/Domino, web (html)

Switzerland: Fabasoft eGov-Suite

European Commission: Own development based on Oracle.

Once again, significant variation was observed across countries. All the big names were reported as being in use, often within the same country, but in addition other products such as Fabasoft eGov-Suite and DocuLive were brought into the limelight.

SOFTWARE APPLICATIONS USED FOR ENTERPRISE CONTENT MANAGEMENT

ICA Members were asked what software application(s) were predominantly used by their Government for content management (CM) at the enterprise level (e.g. Interwoven, Vignette, Documentum, Hummingbird, MS CM Server, IBM Content Manager, ..., other)

Australia: No one application across government: a wide variety of software solutions used.

Austria: Intercom, several others

Canada: No one software is predominant.

Israel: MS Content Management is widely used.

Japan: Government decided a basic specification for exchange of data between ministries.

Norway: DocuLive, file servers

Singapore: MS SharePoint

Switzerland: Day-Communiqué, Imperia

European Commission: Documentum.

Finland and **Malta** did not specify any software application for ECM.

No clear trend emerged from the responses given to this question. Again, there was mention of big names such as Microsoft and Documentum, but also smaller names, as in the case of the products in use in Switzerland.

SYSTEMS TO ACQUIRE KNOWLEDGE FROM OUTSIDE GOVERNMENT

ICA Members were asked what systems were used by their Governments specifically to acquire knowledge from outside Government (e.g. consultancy firms; public discussion forums; University-based research activity)

Australia:

- Consultancy firms
- High-level meetings
- Advisory committees
- Recruitment
- Formal policy submissions
- Public discussion forums
- Research organisations of all forms (national, international, academic, industry)
- Web-based searches
- Press reports
- Internal libraries

Austria:

- Consultancy
- Scientific research

Canada:

- Consultancy firms
- Public discussion forums
- University-based research activity
- Libraries (acquisition, subscription, licensing electronic resources)
- Media monitoring licences
- Internet searching

Finland:

- Cooperation with universities and other research institutions
- Licence agreements with several kinds of information providers (statistics, news, country reports, etc.)

Israel:

- Consultancy firms
- Internet technical forums
- Supplier user forums
- Journals

Japan:

- Advisory bodies
- Industrial organizations
- Consumer groups (etc.)

Malta:

- Consultancy firms (e.g. Gartner)
- Internet searches
- Public discussion forums
- Publications (books, journals)
- Direct contact with solution providers

Netherlands:

- Various methods, depending on the purpose of the study and the availability of funds

Norway:

- Interest org.
- Universities and res. [institutions]
- Consultancy and information vendors

Singapore:

- Public consultations
- Consultancy firms
- Publications
- Research

Switzerland:

- Analysts (MetaGroup, Gartner, Ovum, etc.)
- University-based research activity
- Consultancy firms
- Direct contacts with solution providers and private companies

European Commission:

- Consultancy firms
- External databases and news services
- Internet

Analysis of these replies reveals that certain systems for the acquisition of knowledge were more popular:

- *Consultancy firms*

- *Research activity in Universities and the Industry*
- *Internet searches (including technical and user forums)*
- *Public consultations and discussion forums*
- *Information services (licence-based): statistics, news, country reports*

Also popular were traditional, long-established sources of information and knowledge:

- *Books and journals*
- *Libraries (both paper and electronic)*
- *Media monitoring*
- *Direct contact with solutions providers and private companies*
- *Advisory groups*

SYSTEMS TO STORE KNOWLEDGE ACQUIRED FROM OUTSIDE GOVERNMENT

ICA Members were asked what systems used by their Governments specifically to store knowledge acquired from outside Government (e.g. intranets; knowledge base)

Australia:

- Intranets
- Knowledge bases
- Extranets
- Electronic and paper files
- Libraries
- Communities of practice

Austria:

- The Intercom system

In **Canada**, this activity is integrated within existing information and knowledge repositories, e.g. Information Resource Centre, and accessible through intranets.

Finland:

- Government-wide intranet, to which even the Parliament has access
- Ministries have their own intranets as well

Israel reported the use of an Intranet and electronic archives, which store the content, as well as internal databases based on FileNet, Lotus Domino and MS SharePoint. In the past year many ministries had started to use enterprise portal solutions, such as MS SharePoint Portal Server, IBM WebSphere, and SAP Portal.

Japan:

- Database

Malta:

- Intranet for the Public Service
- Electronic repositories on file servers

Netherlands:

- Various systems, depending on the government organisation and purpose. No overview available.

Norway:

- File servers

Singapore replied that the knowledge was stored on electronic repositories on file servers and the software applications specified previously.

Switzerland replied that there was no single standard system specified for the storage of this acquired knowledge.

European Commission:

- Intranets

These responses indicated the following as the commoner systems for storage of knowledge:

- *Government Intranets*
- *Electronic file repositories*
- *Application systems accessing repositories*
- *Databases*
- *Knowledge bases*

The following non-electronic systems were mentioned:

- *Paper files*
- *Libraries*
- *Communities of practice*

The fact that only the last reply (Communities of Practice) specified human beings as a system for the storage of knowledge suggests that, by and large, the question may have been interpreted as referring to the storage of explicit knowledge.

SYSTEMS TO PROMOTE SHARING OF KNOWLEDGE ACQUIRED FROM OUTSIDE GOVERNMENT

ICA Members were asked what systems were used by their Governments specifically to promote sharing of knowledge acquired from outside Government among Government officers (e.g. discussion of documentation of conferences attended; special interest and reference groups)

Australia:

- Special interest and reference groups
- Websites
- Email distribution
- Interdepartmental committees

Austria replied that the systems depended on the specific relations [between Government officers].

Canada:

- The Leadership Network (www.leadership.gc.ca). Its mandate is to promote, develop and support networks of leaders throughout the Public Service of Canada and assist them in the continuing challenge of public service renewal and modernization.

Finland:

- Different kinds of networks and project groups

Israel:

- Websites and forums, such as the government IT policy website
- Interwise forums, Internet, Domino user groups, internal email

Japan:

- Inter-Ministerial Council and meeting consisting of officials from all ministries

Malta:

- Intranet for the Public Service
- Email
- Websites

Netherlands:

- Purpose-built government intranet with a wide choice of collaboration tools

Norway:

- Email
- Informal networks

Switzerland:

- Research notes
- Conferences
- Ad-hoc working groups

European Commission:

- Sharing of conference documentation
- Intranets

The responses to this question revealed clear patterns. The commoner systems reported for the sharing of knowledge were electronic, and testify to the importance of IT support for knowledge sharing across Government communities:

- *Intranets and related collaboration tools*
- *Email*
- *Websites and online forums*

The most frequent mentions after this went to human systems:

- *Networks/project groups*
- *Ad hoc working groups*
- *Interdepartmental committees, special interest groups, reference groups*

Also mentioned were the more “passive” sharing tools:

- *Research notes*
- *Conference documentation*

SYSTEMS FOR INTERNAL TRANSFER OF KNOWLEDGE AND COMPETENCIES

ICA Members were asked what systems were used by their Governments specifically to transfer knowledge and competencies between Government officers (e.g. documentation of standard

operating procedures, induction programmes for new staff; mentoring; coaching; informational meetings)

Australia:

- Induction programmes
- Meetings
- Structured training programmes
- Systems and Procedural Documentation
- Mentoring and Coaching
- On-the-job training
- Intranets, including whole-of-government intranet

Austria replied that the systems depended on the specific relations [between Government officers].

Canada replied that the Treasury Board Secretariat Publiservice [Government Intranet] acts as the primary repository.

Finland gave details of a new model for government work and programme management; inter-ministerial cooperation is furthered (cf. presentation by Ms. Maija Jussilainen at the OECD Learning Government Symposium, February 2003). There are Government-wide applications for EU Documents, Government Project Register, Decision-Making system of Government, Government-wide intranet and web site of the Government (www.government.fi).

Israel:

- Internal training sessions
- Forums
- Task forces

Japan:

- Introduction programmes for new staff members

Malta:

- Induction programmes for new staff
- Internal training sessions
- Documentation of procedures
- Intranet
- Forums and other meetings

The **Netherlands** replied that there are various systems, depending on the government organisation and purpose.

Norway:

- Seminars
- Conferences
- Handouts
- Handbooks
- Mail
- Informal networks

Singapore:

- Instruction manuals
- Documentation

- Training
- Forums
- New staff induction programmes

Switzerland:

- Research notes
- Conferences
- Ad-hoc working groups

The European Commission:

- Best practice seminars
- Programmes for new staff

Analysis of these responses revealed clear patterns. Most of the responses fell into three main categories, with related sub-categories, which could be summarised as follows:

Training

- *Induction programmes for new staff*
- *Structured training programmes/internal training sessions*
- *Coaching/mentoring/on-the-job training*

Documentation

- *Documentation of systems/procedures), instruction manuals, handbooks, handouts*
- *Research notes*
- *Websites, Intranets, Government-wide repositories*

Meetings

- *Forums/conferences/meetings/seminars*
- *Best-practice seminars*
- *Ad hoc working groups*
- *Task forces*
- *Informal networks*

MEASURES OF THE SUCCESS OF KM INITIATIVES

ICA members were asked how their Governments measured the success of their KM initiatives.

In **Norway**, success of KM initiatives was measured by the degree of establishment and formalisation of secure knowledge networks and sharing of knowledge and information in a secure way. Specific measures included the degree to which not only standard official electronic Government documents were handled by the KM system, but also background material, research and analysis, experiences and best practices.

In **Singapore**, KM success was measured through acceptability measures of systems, e.g. frequency of use, number of repeated uses, user satisfaction; and through contribution to business objectives, e.g. meeting key performance indicators on the Balanced Scorecard.

Austria commented that the success of the KM initiatives in its Government was “middling”.

Australia, Canada, Finland, Japan, Malta, the Netherlands, Switzerland and the European Commission replied that they had no formal measures or had not developed them yet.

The existence of KM metrics tends to be a proxy of the maturity of KM as an established function of an organisation. The absence of formal metrics in many jurisdictions tends to suggest that in certain cases KM may yet have to progress beyond the experimental stage.

OECD activities on Knowledge Management

Early in this Study, the author's attention was drawn to the OECD's activities on Knowledge Management, in which a number of ICA Members were involved by virtue of their countries being members of the OECD.

In 2002, OECD held a Survey on KM practices in central ministries in OECD countries. Information about the survey and its conclusions is found at the following addresses:

www.oecd.org/dataoecd/59/18/1946891.pdf

www.oecd.org/dataoecd/54/2/33688562.doc

Resources about the OECD's "Knowledge Management Project" are found online at the following address:

www.oecd.org/document/16/0,2340,en_2649_34539_2756624_1_1_1_1,00.html

This page contains material about KM activity in Canada, Denmark, France and Germany.

Another OECD KM-related resource online is the e-book "Innovation in the Knowledge Economy", available at the address: www1.oecd.org/publications/e-book/9604041E.pdf

Other OECD resources of direct interest are:

"Knowledge Management: Learning by Comparing Experiences from Private Firms and Public Organisations" - Summary Record of a High Level Forum held in Copenhagen, 8-9 February 2001:

www1.oecd.org/puma/pubs/KM.pdf

OECD Symposium on the Learning Government: 3-4 February 2003:

www.oecd.org/document/14/0,2340,en_2649_34133_1843086_1_1_1_1,00.html

Reports and Case Studies on KM in Public Administrations

In June 2004, the author of this report wrote by email to ICA National Representatives asking for reports or specific case studies on KM activity within their country's Public Administration. The response to this request was limited, but did include an excellent overview from Singapore, and a number of useful online references from Austria and from the United States. The overview provided by Singapore is included in full as Annex D.

Austria

The ICA National Representative for Austria kindly supplied the following references, which are relevant to the application of KM in the Federal Government of Austria:

A case study on the implementation of Fabasoft eGov-Suite as the basis for ERM in the Government of Austria:

<http://falcon.ifs.uni-linz.ac.at/lvas/ss/muellner.pdf>

A declaration of the Federal Government of Austria on Current Issues in Research and Technology Policy (11 July 2000), with content related to KM:

www.bmbwk.gv.at/fremdsprachig/en/science/decl.xml?style=print

A presentation on “Knowledge Management for Government: Enhancing the Quality of Public Service”

<http://falcon.ifs.uni-linz.ac.at/lvas/ws/PPT/traunmueller.pdf>

Research at the University of Linz related to KM:

<http://falcon.ifs.uni-linz.ac.at/research/research.html>

Singapore

Please see Annex D.

United States of America

The United States representative kindly provided a copy of a number of articles on KM that are available online. The following two have a direct bearing on KM in Government:

“Collaborative Government Knowledge” (KMWorld, 28 June 2004)

www.kmworld.com/resources/featurearticles/index.cfm?action=readfeature&Feature_ID=437

“Defining Knowledge Management”, and related responses (destinationKM, 19 June 2002)

www.destinationkm.com/articles/default.asp?ArticleID=949

URLs for Software Companies, Products and Applications

In this section, as a starting point for research, URLs are listed for those software companies, products and applications that are specifically mentioned in this report.

Aleph	www.exlibrisgroup.com/aleph.htm
Amicus	www.amicus.com
Day Communiqué	www.day.com/en/product/productline.html
DocuLive	www.starvisionit.com/Doculive.asp
Documentum	www.documentum.com
Eziboard	www.ezboard.com
Fabasoft eGov-Suite	www.fabasoft.com
FileNet	www.filenet.com
Hummingbird	www.hummingbird.com
IBM	www.ibm.com
ICQ	www.icq.com
Imperia	http://www.imperia.de/en/htmls/index.html (English language)
Interwise	www.interwise.com
iRIMS	www.opentext.com/irims
Lotus	www.lotus.com
Microsoft (MS)	www.microsoft.com
Mobious	www.mobiousinc.com
Novell	www.novell.com
Open Text	www.opentext.com
Oracle	www.oracle.com
Orchestra	www.crossdraw.com/orchestra/
PrettyLib	www.prettybit.fi/en/prettylib4/product.htm
RDIMS	www.rdims.com

SAP	www.sap.com
SiteScape	www.sitescape.com
Teamware	www.teamware.net
TRIP	www.tietotech.se/html/tripint/product/overview.htm
UMS (Telekom Austria)	http://business.telekom.at/produkte/kommunikation/ums/index.php
Voyager	www.endinfosys.com/prods/voyager.htm
WM-data	www.wmdata.com

A Selection of Online KM Resources

This section contains links to selected online resources relevant to KM in Government administration, other than the ones appearing elsewhere in this report, for the benefit of KM practitioners and other interested persons.

Australia

AGIMO – KM Better Practice Checklist

www.agimo.gov.au/practice/delivery/checklists/knowledge

KM Forum

www.austrac.gov.au/knowledge_forum/introduction/index.htm

ActKM Forum

www.actkm.com

Australian Local Government Association – KM page

www.lgconnect.gov.au/index.php?path=206_240_279&nIdNode=279

Canada

Interdepartmental KM Forum (IKMF)

http://groups.yahoo.com/group/ikmf_figs

Health Canada – KM Web Site

<http://www.hc-sc.gc.ca/iacb-dgiac/km-gs/english/kmhome.htm>

Alberta – Personnel Administration Office - KM Guide

www.pao.gov.ab.ca/learning/knowledge/management-guide

European Commission

Information Society Technologies – Unit E2: KM and Content Creation – Projects

www.cordis.lu/ist/directorate_e/kmcc/projects.htm

KnowledgeBoard – The European KM Community

www.knowledgeboard.com

Germany

BundOnline 2005 Knowledge Management System website

www.wms.bundonline.bund.de (German language)

DFKI (German Research Center for Artificial Intelligence)

www.dfki.uni-kl.de/KM (German language)

www.dfki.uni-kl.de/KM/content/e66/index_eng.html (English language)

United Kingdom

KM National Project

<http://www.localgov.gov.uk/page.cfm?pageID=703&Language=eng>

Knowledge Network (KN) Project

<http://e-government.cabinetoffice.gov.uk/Home/Homepage/fs/en>, then search on “Knowledge Network”

United States

KM in the Federal Government

<http://km.gov>

US Department of the Navy – Knowledge Portal

www.nko.navy.mil

General / commercial

BRINT Network / WWW Virtual Library on KM / The Knowledge Management Network™

<http://brint.com> / <http://km.brint.com> / <http://kmnetwork.com>

BSI – Knowledge Management

www.bsi-global.com/Quality_management/Knowledge/index.xalter

IBM Systems Journal, Vol. 40, No.4, 2001: Knowledge Management

www.research.ibm.com/journal/sj40-4.html

Information Research, Vol.8 No.1, Oct 2002: Special issue on Knowledge Management

<http://informationr.net/ir/8-1/infres81.html>

Journal of Information and Knowledge Management (JIKM)

www.worldscinet.com/jikm.html

Journal of Knowledge Management Practice

www.tlinc.com/issue1.htm

KM Resource Center

www.kmresource.com/exp.htm

KMWorld

<http://kmworld.com>

Knowledge Management magazine

www.kmmag.com

Acknowledgements

To Nachman Oron and Choy Peng Wu, respectively ICA Chair and ICA Vice Chair, for their trust, support and encouragement.

To Ines Austern, Managing Editor of the Harris/Elon Agency, for her support during the conduct of the survey.

To Patricia Lupi, Associate Consultant in Knowledge Management in the Office of the Prime Minister, Malta, for her research work and support.

To Maija Jussilainen, Knowledge Specialist in the Government of Finland, and Kjetil Fladmark Larsen, of the Government of Norway, for their very helpful responses at the start of the Study.

To all those, in particular Costas Agrotis, who, at some time or another, either directly expressed interest in taking part in the Study Group, or encouraged participation by members of their communities.

To all those who responded to the Survey Questionnaire and to requests for information.

ICA International Council for Information Technology in Government Administration
Study Group - 2003

Knowledge Management (KM) within Government Administration

QUESTIONNAIRE

Your name:

Your country:

Your email address:

Please type your replies on the right-hand side of the questionnaire. Only short answers are required.

Does your Government use the term “knowledge management”?	Yes [] No [] Don't know []
If yes: What is its definition?	
If no: What related terms are preferred in your country?	
Does your Government have a formal KM or KM-related policy and/or strategy?	Yes [] No [] Don't know []
If yes and it is in the public domain: Please provide a copy, or at least a reference to it. Please indicate if it covers one or more of the following IT aspects of KM:	Electronic records management [] Enterprise content management [] Software to support collaboration [] e-Learning [] Common data/file repositories [] Corporate data architecture standards []
Is there a person with lead responsibility for KM initiatives in your Government?	Yes [] No [] Don't know []
If yes: What is his/her position title?	
What department of Government does he/she work in?	
Does your Government have a budget or budgets devoted specifically to KM?	Yes [] No [] Don't know []

<p>If yes: How large is the total KM budget:</p>	<p>In absolute terms: Expressed as a percentage of the Government's total ICT budget:</p>
<p>What software applications are predominantly used by your Government today for each of the following collaborative functions:</p>	<p>Email: Discussion: Instant messaging: Calendaring: Library: Directory:</p>
<p>What software applications does your Government predominantly use for the handling and storage of official electronic Government documents? (e.g. MS SharePoint, Lotus Notes/Domino, Documentum, Hummingbird, FileNET ..., other)</p>	
<p>What software application(s) does your Government predominantly use for content management (CM) at the enterprise level? (e.g. Interwoven, Vignette, Documentum, Hummingbird, MS CM Server, IBM Content Manager, ..., other)</p>	
<p>What systems does your Government specifically use to acquire knowledge from outside Government? (e.g. consultancy firms; public discussion forums; University-based research activity)</p>	
<p>What systems does your Government specifically use to store knowledge acquired from outside Government? (e.g. intranets; knowledge base)</p>	
<p>What systems does your Government specifically use to promote sharing of knowledge acquired from outside Government among Government officers? (e.g. discussion of documentation of conferences attended; special interest and reference groups)</p>	
<p>What systems does your Government specifically use to transfer knowledge and competencies between Government officers? (e.g. documentation of standard operating procedures, induction programmes for new staff; mentoring; coaching; informational meetings)</p>	
<p>How is the success of KM initiatives measured by your Government?</p>	

Please feel free to add any further comments or related information.

Thank you for your contribution. Please email your response to Dr Hugo Agius-Muscat at the e-mail address hugo.agius-muscat@gov.mt. In case of any queries please email, or call on telephone number +356 2599 2750.

ANNEX B

Survey Respondents

The following is a list of the ICA Countries that returned a completed Survey Questionnaire, and the names of the corresponding respondents.

Australia	John Grant (on behalf of the Commonwealth Government)
Austria	Hans Werner-Ksica
Canada	(Treasury Board Secretariat)
Finland	Maija Jussilainen
Israel	Shimon Broner
Japan	(Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Malta	Hugo Agius Muscat
Netherlands	Gino Laan
Norway	Kjetil Fladmark Larsen
Singapore	Chew Siew Kheng
Switzerland	Jean-Jacques Didisheim
European Commission	Jean-Pierre Weidert

Knowledge Management at the Finnish Government

Maija Jussilainen

Introduction

According to the Knowledge Management survey carried out by OECD Finland is one of those countries where Knowledge Management (KM) is advanced. In the following, I try to assess the reasons for the success – even though we have to remember that the success is relative, not absolute: so much still needs to be done.

Political, cultural and social factors behind the success

Political factors

KM of the Finnish government is a part of the public administration development. Public administration development has long time been on the political agenda. During 1987-1995 started a new wave of public administration reform, which was influenced by the New Public Management –thinking, common to some other OECD countries, too. In Finland the reform of the public management has extended to all sectors of the administration: to the structure of the administration, guidance systems, quality work, personnel management, cultural issues. The focus has alternately been on the local, regional or central administration. Today the focus is on the central government reform, including the development of KM.

It is important to notice, that the reforms of the public administration, including the actual the central government reform, is on the **political** agenda. The reform is not led by the civil servants, but by the politicians, that is, by the ministers. This has many implications. One of those is that the point of view of the citizens is included in the reforms. Another implication is that the strategies have been put into practice for example in the form of legislation; e.g. the strategies concerning the information society.

Cultural factors

The reforms change the culture, but there is also a longer tradition of openness in Finland. The tradition of the openness stems from the 18th century when Finland still was a part of Sweden. Finland has a rather new legislation that strengthens the tradition of the openness.

The new Constitution of Finland entered into force on 1 March 2000¹. It includes the section “Freedom of expression and right of access to information”. Maybe more important in practice is the Act on the Openness of Government Activities which came into force in December 1999². It replaced the Act on the Openness of Government Records, from 1951. The objectives of the Act

¹ <http://www.om.fi/constitution/index.htm>

² See address: <http://www.om.fi/1184.htm>

are "to promote openness and good practice on information management in government, and to provide private individuals and corporations with an opportunity to monitor the exercise of public authority and the use of public resources, to freely form an opinion, to influence the exercise of public authority, and to protect their rights and interests." In comparison to the older act, from 1951, the government has an obligation to promote the openness, not only to react to the requests of the citizens.

In Finland, openness is an underlying value in the public administration. It is also, along with access to information, an issue to which constant attention is paid in public management development work. Openness is not only about laws and regulations – it is also very much about attitude and commitment.³

Besides the tradition of the openness, there is also another feature of the Finnish culture that promotes the advancement of the KM: the technological culture and the common use of information and communication technology.

Social factors

One could also see broader social factors behind the advancement of KM, e.g. the good learning results of the Finnish school system that has been recognized by the PISA study of the OECD⁴ and the welfare state, where citizens are used to expect good service from the public sector. In developing public services it is essential to carefully listen to the citizens' needs and be prepared to take their feedback into consideration. This, in turn, requires continually improving the quality and accessibility of services, listening to citizens and clients, operational openness and strengthening of user democracy. In the case of knowledge and information, this means that the internal knowledge processes have to be smooth, in order to be able to inform, hear and serve the citizens. This is how the external services and the internal KM of the Government come together.

Knowledge Management – how is it understood at the Finnish Government

The good results for Finland in the KM survey by the OECD reflect the situation in ministries, not at the level of the whole government. Most of the ministries have an information management (IM) strategy; some of them are preparing or already have got a KM strategy, too. These strategies focus on the information or KM of the ministry, in some cases both KM of the ministry and the administrative sector of the ministry.

At the governmental level, there are several concepts of KM. Even though there is neither common understanding nor a holistic KM strategy for the Government, there are common strategies for some sectors of Knowledge Management, as for example for the Human Resource Management and information services of the Government. The Government Information Management Strategy is in the making. Developing KM is intertwined to the Central government reform, too. In the following I shall try to give an overview of all these more or less sector strategies.

Human Resource Management

The Human Resource Management (HRM) is an essential part of KM. The issues of HRM have not become actual mainly because of the KM discussion, but because of the concern of losing

³ Examples of Mechanisms for Public Scrutiny and Access to Information: The Finnish experience by *Katju HOLKERI* Counsellor, Ministry of Finance, Finland

⁴ Measuring Student Knowledge and Skills: The PISA 2000 Assessment of Reading, Mathematical and Scientific Literacy. OECD ISBN 9264176462; <http://www.pisa.oecd.org/>

knowledge and know-how, when the civil servants retire. It is estimated that nearly half of the personnel will be leaving in 2001-2011.

The Government was given in August 2001 a resolution on the principles of State personnel policy. The Government considers it important for the State to be a model employer in purposefully implementing good personnel policy. With well managed employer and personnel policy, skilful management, and competent and committed personnel, the conditions will be created for effectiveness and good service capacity in public management, and thus for national competitiveness. The government has set general targets for the State as an employer:

- The basic values of the state administration are effectiveness, quality of expertise, the service principle, transparency, trust, equality, impartiality, independence and responsibility.
- Competitiveness as an employer will ensure public sector unit competent and committed personnel; the state employer will improve career planning and job mobility among its personnel, it will promote the information society by ensuring that personnel, management, working processes and operating culture all support learning.
- Good managers look after every individual as well as staff resources overall: the government's aim is to change the management climate towards clear emphasis on innovation, trust-based interaction, cooperation and skills in human relations.

This resolution is followed by the strategy for developing management in central government for the years 2002-2012, and an ancillary implementation plan. In the years to come a large proportion of management will retire. It is estimated that until 2012 about 85% of the senior civil servants will leave, because of the retirement or of other reasons. Mainly for that reason a systematic and extensive development programme for management is seen both topical and necessary.

There is also a draft for an HRM information strategy for public administration employer and personnel policy. The strategy contains plans for strategic HRM information systems within the state administration, too.

The Ministry of Finance has developed Human Resources Accounting System (HRA) for the state agencies. Personnel inputs are e.g. number and structure, working hours, labour costs, travel costs, demand and supply of labour force. The system contains also the job satisfaction enquiry in the agencies. It also includes models and methods to assess skills and competencies as resources in a strategic management process at the agency level. The HRA system is used by 80% of the agencies.

The reform of the salary systems of the ministries is going on in most of the ministries. According to the new system there is a part of the salary based on the tasks and the other part based on the personal achievement. The ministries have created different kinds of criteria for the personal achievement. They may be for example achievement of the objectives, mastery of the profession, cooperation, and leadership (for the managers). The new salary systems give an opportunity to direct the staff to the wanted direction, e.g. to share information, to cooperate and to create networks, by rewarding. 23 % of the public administration has implemented the new salary system. However, it is important to notice, that the reform of the salary system is only a part of the new management; the change in the management culture is even more important.

Role of the Government Information Management Unit – The Government Information Management Strategy

At the beginning of the year 2002 the Government Information Management Unit started its work. Its home ministry is the Ministry of Finance. The task of the Government Information Management Unit is to create a common basis for information and communication systems in the

whole government, but also such a basis that the systems can communicate with the world outside the government, both nationally and internationally. This means that the international and national standards have to be respected. Originally, the common information systems of the government were built separately from each other. Their aim was to serve one certain process of the government, e.g. the decision-making of the government or the drafting of the state budget. Nevertheless, the processes are connected with each other, thus the information systems should be compatible. One task of the Unit is to build a solid ICT architecture for the common information systems of the government. This will be a part of the Information Management Strategy of the Government which is in the making; it shall be finished in March/April 2003.

Close cooperation with the information management units of the ministries is needed. Especially important is the cooperation with the Prime Minister's Office, because the Prime Minister's Office owns the main common information systems - such as EUTORI, the document system for the EU affairs, PTJ, decision-making system of the Government, Senaattori, the Government intranet portal, as well as the Internet web sites of the Government. The Government Information Management Unit owns the technical platform of these information systems and is responsible for the development of these information systems, together with the information system owner. The Unit has a whole responsibility for the register on projects and legal preparatory documents of the Finnish Government (called HARE, www.hare.vn.fi), the national portal of public sector information and services (www.suomi.fi; www.finland.fi), as well as for the web form service (www.lomake.fi).

Crucial factors for the success of the Unit are:

- the implementation of compatible metadata as well as structural data and document standards
- achievement of sufficient interoperability of government- level databases and information sources
- properly managed implementation projects
- development of genuine cooperation between information, communication and IC technology professionals

Strategy of the information services

The network of the information services of the ministries, called VALTIPA has during its ten-years existence made four strategies. The most recent for the years 2002-2004 emphasizes the importance of integrating the information services to the substance (business) processes and offering analysed information for the different phases of the substance processes. Sharing of knowledge and information, networking and cooperation are the further themes of the strategy.

Anyhow, the strategies are worth of nothing if they are not put into practice. The development of common practices among ministries is a crucial issue. There is a paradox: the common practices make lower the cultural barriers between ministries and, on the other hand, low cultural barriers are a prerequisite for common practices. Among the information service professionals there are several "communities of practice": e.g. groups for the archivists, record managers, librarians, information specialists, but we have seen how difficult it is to create common practices if the whole organization is not supporting the inter-ministerial work.

Central Government Reform in Finland

The development of KM of the Government is tightly intertwined with the central government reform. As told at the beginning, during 1987-1995 a new wave of public administration reform was started. One sign of the reform was the Government Resolution "Guidelines of the Policy of Governance: High-quality services, good governance and a responsible civic society", from 1998. This resolution can be seen as a background for the central government reform , which was

initiated in May 2000. A group of ministers was formed to head the project, supported by another group, a group of civil servants with a representative from each ministry. In September 2000, thirteen projects were launched to carry forward the reform.

The main goals of the reform are:

- To strengthen the strategic capacity of the Government.
- To improve the citizens' and civil servants' confidence in administration and to empower the citizens in public affairs.
- To create new methods and tools and to improve the quality of information and knowledge on which the decision-making is based on. The strategic programme policy approach is strengthened in the work of the Government, in order to improve the inter-ministerial planning and coordination.

Knowledge Management as a part of the Central Government Reform

The aim of the KM as a part of the central government reform is to bring the strategically important knowledge and information into effective, common use in the Government.

The reform is needed from the KM point of view because there is

- lack of horizontal cooperation between ministries
- lack of information and knowledge sharing
- lack of coordination and cooperation of information management
- lack of responsible organization for KM of the whole government.

The Programme Management as the new model for government work

The strengthening of the strategic capacity of the Government is one of the aims of the central government reform. The main instrument for this is the programme management, which is a new model for government work – if the new government in the spring 2003 so decides. I can describe only what has been planned, but it is too early to say anything about the results.

The role of the Government Programme as the main strategic document of the Government will be developed. The Government Programme shall clearly indicate the most central socio-political targets of the election period. The Government Programme shall, more clearly than at present, be a guideline document outlining extensive horizontal entities. The Ministries shall draft future outlooks to support the Government Programme work. The realization of the programme shall be evaluated during the four years' governmental period. The Government shall prepare a strategy document making the implementation of the Government Programme more concrete and containing focused policy programmes: government-level inter-ministerial political programmes and strategic projects of individual sector ministries. Each ministry may have its own strategic portfolio, too. The aim of the strategic policy programmes is to solve bigger social problems, as for example employment, or business policy, or information society issues. These issues do not fit only in one ministry field, and therefore the projects should be inter-ministerial. The new model also combines the policy with its financing: the Government shall handle and review the strategy document annually in connection with the budget framework method. On the basis of the review, both activities and resources shall, where necessary, be re-directed. The new model for government work is not a structural change, but a functional change. The joint use of Government personnel shall be promoted and the support services of the Ministries shall be combined. Some new resources are needed: there shall be a strategic secretariat in the Prime Minister's Office to coordinate the policy programmes and to follow-up the implementation of the Government Programme. The Prime Minister's Office is also responsible for the development of the

knowledge support for the policy programmes – one knowledge specialist is engaged to coordinate the knowledge support.

Knowledge support for the Strategic Policy Programmes

The policy programmes are a challenge for the inter-ministerial cooperation. They also are a challenge for the Government KM. The inter-ministerial policy programmes make it necessary to develop inter-ministerial knowledge processes and inter-ministerial sharing of knowledge. This is a challenge for the information management and information systems, too.

New kinds of forums for sharing both tacit and explicit information and knowledge are planned. The future reviews or future scenarios have been developed to help political actors to perceive the central issues and to use existing information and knowledge when outlining the political programmes. The main target group are the political parties. The ministries shall be responsible, but also external participants would be connected to the work. The ministries would offer seminars, discussion forums etc. Horizontal, that is, inter-ministerial, discussion forums would also be offered by the ministries, both face-to-face forums and digital forums in the Government intranet portal Senaattori.

Evaluation ex ante and ex post is essential in the implementation of the policy programmes. The evaluation process should be at least two phased and focused on two things: first, there is a need to evaluate and follow the development and budgetary discipline of the project itself, but we should also be prepared to better evaluate the societal impact of the project. How well was the purpose of the project achieved? The ministries have traditionally commissioned studies from the universities and other research institutions, but the need to intensify the cooperation with the research institutions has been noticed. Also the interplay of research and strategies has been discussed. The evidence-based policy making has been posed in this discussion. The think tanks have been discussed, at least in the newspapers.

The Government intranet portal Senaattori has a central role as an interface for the knowledge support. The portal has from the very beginning offered information from the outside and the inside of the government. The editors of the portal have made licensing agreements on news services, statistics, legal information, dictionaries, country reports and other kind of external information sources. The information has been open to everybody working at the government. The disadvantage has been, that there has, until now, not been technical possibilities to customize the information. The supply of the raw information is voluminous; but there is a shortage of analysed information. There are plans to offer filtered, personalised and analysed information as a Knowledge support for the Strategic Policy Programmes.

The interface for the policy programmes in the portal shall offer the essential documents of the programme, summarizing information on the advancement of the programme, news, research, statistical etc. information on the substance of the programmes. The ideal case would be that the government intranet portal offers a virtual working space for the people involved in strategic projects, and that the politicians, researchers and civil servants involved in these projects form communities of practice that have a profound and versatile understanding of the societal problems they need to solve.

But as said, policy programmes are an issue on which we do not have experience, we only can tell the discussion and plans.

Informing and hearing the citizens

I was asked to tell something about informing and hearing the citizens, too. Here we come back to the Act on the Openness of Government Activities. Besides that, the government accepted in 2001 the Recommendation on the Communication for the Public Sector. Openness, trust of the citizens,

and efficiency of the administration are the goals of the communication of the public sector organizations.

The “Hear the Citizens” project finished its final report at the end of 2002. The project suggested new forms of consultation of the citizens. The purpose of consultation is to provide citizens with opportunities to influence planning processes and also to gather expert and empiric knowledge to the administration. The quality of preparation and decision-making is highly dependant on administration’s ability to utilize and evaluate different justified opinions and viewpoints. The consultation refers to all processes through which information is collected to enrich the knowledge of the issue under preparation, leading to better-founded decision-making. These processes may include circulations of proposals, public hearings, use of discussion forums etc.

The citizens have not only right to be informed and heard. Also the digital transactions are developed both for the citizens and for the enterprises. There is an action plan of the public sector for developing the digital transactions. This action plan has connections to the eGovernment program by the European Union.

There are several digital tools of the government for the citizens and for the enterprises:

- A national portal – www.Suomi.fi, as well as for the net form service (www.lomake.fi)
- The discussion forum for the citizens www.otakantaa.fi (Share Your Views with Us) through which ministries can consult citizens
- The register on projects and legal preparatory documents of the Finnish Government www.hare.vn.fi
- JULHA – a register of contact addresses (www.julha.fi)
- Internet web site of the government (www.government.fi) and those of each of the ministries
- The Business Information System BIS is a joint service for enterprises and communities that transact with the Finnish Trade Register, Foundations Register or Tax Administration, www.ytj.fi
- Digital information transfer from the enterprises to the authorities, www.tyvi.fi

Assessment of KM – what have we achieved and what more needs to be done

What has been achieved?

- Public management and KM development are on the political agenda
- Legislation, recommendations, guidelines and strategies supporting KM exist
- The central government reform includes explicitly and implicitly KM dimensions
- Government Information Management Unit has started its work

What difficulties have we met?

- The concept and practices of Knowledge Management are not known
- Responsibilities of developing the KM are not decided

One task of the Government Information Management Unit is to contribute in forging the KM strategy, too. As mentioned, the writing of the strategy has not yet been started. In fact, it has not yet been decided, who or which organization/organizations is/are responsible for the KM strategy. My own opinion is, that the Government Information Management Unit should not take the responsibility – the Unit should contribute, but it should not be responsible for the strategy. At the moment the majority of the personnel of the Unit has a technical background, but the challenges of KM are mainly other than technical. Information and communication technology is certainly necessary for KM, but it would be a mistake to forget the other dimensions of KM: the role of the strategic management, the organizational culture, human resource management, content of the knowledge and communication. The aim of the KM is to support the strategic management of the organization, and the main issue is not the technology.

What more needs to be done

- Current task: the planning and realization of the knowledge support for the policy programmes

Conclusion

The Finnish Government does not yet have a KM Strategy, but several sector strategies. It is possible to develop parts of KM without a KM strategy, but at some stage the need of a holistic KM strategy becomes obvious – and in Finland we are at that stage.

ANNEX D

KM Case Studies from the Government of Singapore

Under the first eGovernment Action Plan (2000-2003), several Knowledge Management projects were initiated in the Public Sector. This write-up provides a summary of the projects.

Agency's Name : Agency for Science, Technology & Research (A*STAR)

A*STAR's mission is to foster world class scientific research and human capital for a vibrant knowledge based Singapore.

A*STAR's KM Vision is to create a knowledge-based organisation for better A*STAR performance.

Project Name : Knowledge Universe

A*STAR had embarked on the KM journey at the beginning of 2002 and started Knowledge Universe with the following aims:

- 1) to identify the key knowledge requirements of the organization
- 2) to codify this knowledge where appropriate and make it readily accessible to its users and potential users,
- 3) to identify and facilitate ready access to the sources of such knowledge, and to grow and develop such knowledge bases where necessary.

The project was carried out in 3 Phases:

Phase 1 - Put in place a powerful IT infrastructure to support KM

A*STAR has put in place a IBM Lotus based portal consisting of Quickplace, Sametime, WebSphere, Dom.doc and discovery servers. It provides a central access to all knowledge resources with organisation wide document indexing, document management, as well as collaborations using instant messaging, online meetings and project workspaces.

Phase 2 - Increase general awareness of KM

Training workshops were conducted to familiarise staff on the various features of the KU and how to take advantage of the IT infrastructure. A one-to-one introduction of KM to the senior management, presentation at management meetings, as well as switching all Intranet to be accessible only through KU.

Phase 3 - Increase the ability and willingness of staff to participate actively in KM

A*STAR focused on building trust and teamwork in order to encourage KM sharing, changing the mind set from one of "limit access to all my documents unless I explicitly share them" to one of "I share all my documents unless I explicitly restrict them".

Agency's Name : Attorney-General's Chambers (AGC)

AGC's mission is to provide sound legal advice to the Government and develop a fair and responsive legal system that furthers good public administration.

AGC's KM Vision is to develop the human capital and have a culture of sharing so as to provide quality legal services through the bold, effective, swift and thorough application of knowledge and experience.

Project Name : Law in Order – K-mining AGC's Legal Jewels

AGC recognises that a clearly enunciated knowledge management strategy is especially important in an environment where the pervasive use of information technology has resulted in the exponential growth of information. Globalisation and technology has accelerated the pace at which law is developing.

As a result, effective digesting of legal source-materials, combined with the ability to track global developments for timely and quality information requires a sophisticated environment which calls for the careful use of relevant technology within an organisational structure tuned to support the knowledge capital framework.

AGC's intellectual capital resides in the legal jewels that are produced when AGC's best legal minds collaborate and engage in robust discussion and thorough research on important legal issues and opinions. A KM framework is necessary to mine for these jewels on a need to know basis.

The project was carried in 2 phases :

Phase 1 – Develop KM Blueprint

The KM Blueprint involving a Knowledge Audit, Knowledge Needs Analysis, Legal Taxonomy, Process-mapping and Change Readiness Assessment was developed.

Phase 2 – Implement KM Portal

The KM Portal replaced the AGC Intranet and consolidated access and federated search across multiple legal knowledge repositories and applications.

Agency's Name : Civil Service College (CSC)

CSC's mission is to develop people for a first class Public Service.

CSC's KM Vision is to nurture an enterprising organisation with excellent knowledge practices and a vibrant and committed pool of 'knowledge' professionals, who have a sense of belonging, inquisitive and reflective in nature and pro-active in knowledge sharing.

Project Name : Project Liquid Spark

Project Liquid Spark was conceived in late 2000 with the following objectives:

- 1) Identify crucial knowledge needs and establish accessible repositories;
- 2) Identify ways of fostering a knowledge sharing culture across CSC; and

3) Equip key personnel with adequate competence and skills in KM.

The CSC has approached Knowledge Management (KM) in its organisation with the awareness that implementing elaborate IT systems to capture and share “explicit knowledge” is only a start. Its KM framework focuses not only on “hard” technology and databases but places due emphasis on “soft” enablers such as culture, communities and leadership. Its approach is 3-pronged:

1) Building Organisation-Wide Awareness

Its first tasks have been to invest in educating the stakeholders on KM as well as in understanding their information requirements and concerns, through dialogue sessions and interactions with management and staff.

CSC has also sought innovative ways to drive home the message of knowledge sharing and collaboration to all its employees – by cultivating a fun learning environment. In 2001, a CSC information audit survey was launched as part of a college-wide KM awareness event.

These KM awareness-building and assessment activities have also contributed to the development of CSC's own KM implementation framework.

2) Piloting Liquid Spark (LIQs) Secured Portal

In 2002, CSC developed an information gateway concept and called it 'Liquid Spark'. Liquid Spark (LIQs) consists of two primary components, namely the LIQs Homepage and LIQs Secured Portal. The LIQs Homepage is developed by the CSC KM team and forms the first information gateway for CSC staff when they first log into their work stations. The CSC KM team also piloted an off-the-shelf KM system to a select pilot group of users. The LIQs Secured Portal is aimed to allow staff to experience the power of multi-platform information search, document management and sharing across the college and has been reintroduced as the 'Liquid Spark (LIQs) Secured Portal'. Apart from the technical implementation, due emphasis was also placed on the communication programme to communicate the benefits of KM.

3) Nurturing a Collaborative Culture

In the effort to also encourage knowledge sharing behaviour among staff, an incentive structure is developed to encourage sharing. This incentive programme, also known as SMILE (Sharing Moments in a Learning Environment) rewards staff with points for participating in knowledge sharing and other collaborative activities. Apart from the incentive structure, knowledge sharing behaviour is also represented as a desirable trait under 'Teamwork' in CSC Staff Performance Appraisal Structure.

In addition, new staff is also introduced to KM as part of the staff induction programmes. Also, the CSC KM team collaborated with the Corporate Development (CD) team to conceptualise a monthly corporate learning session called 'RipOfK' (Ripples of Knowledge), in connection with the Liquid Spark concept.

Attempting to surface potential tacit knowledge in across the college has called for more innovative, personal and interactive approaches. The CSC has since piloted initiatives such as After Action Reviews (AARs), knowledge yellowpages and informal Communities of Interest/Practice (COIs/COPs) to engage staff across the college in meaningful conversations and exchanges. It remains the key to encouraging the sharing of tacit knowledge - a sense of belonging to the college and people around

them; people having compelling and relevant reasons to share their knowledge openly, proactively seeking information to reduce invention of wheel, constantly reflecting on lessons learned and actively seeking collaborative opportunities.

Agency's Name : Ministry of Law (MinLaw)

MinLaw's mission is to ensure a sound legal infrastructure, optimise land resources and promote intellectual property to support Singapore's economic and social goals.

The Ministry of Law aims to make innovation a way of life; part and parcel of officers' work such that it is intuitive for them to continually think of new ways of **doing things differently** and **doing different things**.

To achieve these desired outcomes, MinLaw's approach has been to leverage on KM principles to build a culture of Innovation and putting in place a system to cultivate this culture.

Project Name : Garage.Gov

The project covers 2 phases – an initial discovery phase to ascertain both officers' and organisations' needs to further integrate innovation and knowledge management processes to their work processes; and the design and development of the online platform (Garage). Through GARAGE, officers will:

- 1) Be guided through an idea-to-innovation process;
- 2) Gain access to knowledge tools and a repository of resources; and
- 3) Be connected to collaborate with colleagues on new ideas for the Ministry.

Agency's Name : National Junior College (NJC)

NJC's mission is to be the "College of the Nation: Home of Scholars and Leaders who Lead with Honour".

Project Name : Knowledge@NJC

Knowledge@NJC had the following objectives :

- 1) for better management of knowledge resources across multiple knowledge repositories, processes and people;
- 2) for better management of 'knowledge vacuums' due to staff movement; and
- 3) for reducing rework and reinvention so that the College could focus on adding value and encouraging creativity and innovation.

The culture of sharing is already pervasive in National Junior College as it is clear that pooling of resources and sharing of knowledge and expertise help both the professional development of staff members and the achievement of academic and non-academic development of their students.

The critical assets to the entire Teaching and Learning process revolve around two main areas:

- Monitoring and Documentation process to trace asset enhancement, and

- Retaining the experience gained by teachers and making the knowledge available to all

Knowledge@NJC is the technology-based solution to support KM at NJC. It includes the Knowledge Base for teachers, known as the Teacher's Centre, which is a structured database that houses all academic resources. Its powerful search engine enables both teachers and students to locate what they need rapidly.

All the teachers in NJC have access to almost any kind of information they need through the **Teacher's Centre**.

The information is systematically categorised which makes retrieval virtually effortless. Furthermore, through the Power Search feature, teachers can use keywords to locate the accurate data.

Agency's Name : National Youth Council (NYC)

NYC's mission is to develop a vibrant, highly connected and self-sustaining youth sector so as to nurture the World-Ready Youth.

KM contributes by promoting a knowledge sharing culture to build up the community bonds and intellectual capacity of key units in the youth sector. These units include NYC sections and partner agencies that contribute actively to youth development.

Project Name : KM for the Youth Sector

The project focuses on applying Organic KM principles and techniques to aid the successful management of tacit knowledge and holistic KM implementation. Its key objectives are:

- 1) to preserve both tangible and intangible knowledge assets within the organisation that were important to the business processes and yet vulnerable to loss; and
- 2) to leverage on knowledge sharing in order to achieve the vision of building a vibrant, highly connected and self-sustaining youth sector so as to nurture World-Ready Youth.

NYC applied Organic KM community model to categorise NYC's communities by their dominant styles of knowledge creation and transmission, examine the interactions and sense making across communities and use central communities as catalysts for knowledge flows across the organisation. As a result, the staff became more aware of their community membership and sought to reinforce the knowledge channels, creating greater cohesion and knowledge sharing.

Story Circles were formed where staff with a common and shared project experience retold anecdotes related to that experience. NYC also proceeded to create Alternative Histories, which used fictional space to uncover further knowledge for the Knowledge Asset Map. These techniques proved to be a very effective form of after-action review and even project planning, as project members were asked to flesh out best case and worst case scenarios.

NYC examined the criticality and vulnerability to loss of both tangible and intangible knowledge assets to the organisation's business processes and was able to identify measures to either reduce the risk of loss for the identified knowledge assets or to

re-look at the business processes to reduce its dependency on the uncontrollable knowledge assets.

Agency's Name : Standards, Productivity and Innovation Board (SPRING)

SPRING's mission is to raise productivity so as to enhance Singapore's competitiveness and economic growth for a better quality of life for its people.

SPRING's Innovation & Quality Circles (IQC) Programme is a foundation for organisation excellence. IQCs need to learn from best practices and share their experiences with other teams that can lead to breakthrough ideas. The programme's aim is to have IQCs that create value across organisation's processes through the leveraging of teams' knowledge.

Project Name : Knowledge Portal for Innovation & Quality Circles (IQCs)

The IQC KM Portal was developed to enable IQCs to source information and materials such as best practices reports, reference materials, tools and templates, advices, feedback and comments. IQCs can also exchange tacit knowledge through online discussions.

SUMMARY

The agencies involved have cited benefits of applying KM practices such as improved efficiency and productivity, improved integration and better management of critical knowledge resources.