Bellanet International Secretariat

Knowledge Management for Development Organisations

Report of a workshop co-organised by the Bellanet International Secretariat, the Department for International Development (DFID), the Canadian International Development Agency (CIDA), The Deutsche Gesellschaft Fur Technische Zusammenarbeit (GTZ) and The Swiss Agency for Development and Cooperation (SDC)

Contents

Knowledge Management for Development Organisations	1
Contents Error! Bookmark not define	_2 ed.
How to use this report	
Executive Summary	6
Workshop Overview	10
Keynote Presentations	16
The development of knowledge management and why it is important - Charles Savage	17
Knowledge Management at the World Bank - Steve Denning	21
Defining Purpose and Strategy	29
Overview of Purpose and Strategy - Lyle Makosky	30
Case study on defining purpose and strategy: The British Petroleum story and its adapt at at Tearfund - Nick Milton and Paul Whiffen	ion 36
Knowledge Resource Mapping	41
Overview knowledge mapping approach - Lyle Makosky	42
Case study 1 on knowledge resource mapping: using business lines/knowledge asset mod Chris Smart	el - 45
Case study 2 on knowledge resource mapping: using an external consultant - Peter Kibby_	49
Accessing Knowledge	54
Overview of two core enablers of knowledge access- Lyle Makosky	
Overview of range of possible technologies - Peter Kibby	
Case study on developing a technological OneWorld.net support strategy in a development organisation - Peter Armstrong	
Case study on future knowledge management technology directions at CIDA - Adrian Poplawski and Micheline Chartrand	n 64
Knowledge collection/codification approaches	68
Case study: DFID- Adrian Blundell	69
Communities of Practice	73
Introduction to Communities of Practice - Louis de Merode	74
Case study on Communities of Practice: UNDP on the network - Steve Glovinsky	81
Facilitation as enabler	87
	88
Of Greenhouses and a lack of words: developing the Intranet for P&D at GTZ - Manfr	ed 92
Fostering Leadership and Culture	96

Overview: fostering leadership and culture - Lyle Makosky	97
Panel: Getting leadership and organisational buy-in- Jean-Pierre Beg uin Adrian Poplawski	
What is a chief knowledge officer - Jean-Pierre Beguin, Steve Denning, Adria	n Poplawski 106
Supporting organisational learning through knowledge management, c management, and performance management - Pentti Sydanmaanlakka	
Case example on affecting culture to support knowledge management - Gisela	a Wasmouth 115
Building knowledge management networks: going over the territory - Geoff E	Barnard 119
Fostering knowledge management in the internat ional community	121
Fostering knowledge management in the International Development Confacilitated by Lyle Makosky	
Appendices	127
Appendix One: Agenda	
Appendix Two: Workshop Participants	132
Appendix Three: Presenter Biographies	137
Appendix Four: Workshop Discussion on Distinguishing Knowledge and Info	ormation 143
Appendix Five: Terms and Definitions	144
Appendix Six: Workshop Sponsors	149

How to use this report

This report captures the proceedings of the Knowledge Management Brighton Workshop held on 26 – 28 June 2000 at the University of Sussex.

It is divided into the following **eight** sections:

- 1) Executive Summary
- 2) Workshop Overview
- 3) Keynote presentations
- 4) Defining Purpose and Strategy
- 5) Accessing Knowledge
- 6) Fostering Leadership and Culture
- 7) Fostering Knowledge Management in the International Development Community
- 8) Appendices

The following pointers indicate ways in which you may wish to use the report for particular purposes.

Scanning the proceedings

For a quick read of the proceedings, an **Executive Summary** highlights key trends and main points of discussion.

Workshop Overview

The **Workshop Overview** outlines the design and provides a view of how the three days progressed. It gives an idea of the methodology employed to encourage participation and to deal with primary issues in the knowledge management arena.

The workshop agenda is also included in the appendices providing an idea of the flow and duration of presentations.

Knowledge management orientation

The **keynote presentations** deal with the concept of knowledge management, central issues and what appear to be emerging as universal 'principles'.

Themes

Each section yields unique insights. Sections 3-5 cover the workshop themes and sub-themes.

The **defining purpose and strategy** section includes discussion of how organisations assume knowledge management agendas and why they use knowledge mapping techniques.

Accessing knowledge deals with techniques for both collecting knowledge and facilitating processes of knowledge sharing.

Fostering culture and leadership discusses ways in which organisations can achieve buy-in from senior management as well as possible ways of structuring a knowledge-centred organisation.

Key issues in presentations

Synopses (shaded in grey) are included early on in each of the presentations to provide quick insight into the key issues dealt with.

Case studies

The case studies reported within each of the sections are stories about organisational experiences in these areas. When possible, these have been captured as stories to help readers identify areas of commonality and difference. Refer to the **thematic sections** in the contents to identify particular case studies that fall within a theme.

Workshop outcomes

For an understanding of the proposals and actions emanating from the workshop, refer to the penultimate section on **Fostering Knowledge Management in the Development Community.**

Presenters and participants

The **appendices** contain information on all presenters and participants. In the case of presenters, biographies are provided explaining areas of expertise, organisational location, portfolio and interests.

Glossary

A glossary of key terms used throughout the conference is included in the **appendices**. These terms are often presented as quotations from people active in the field, reflecting the workshop's emphasis away from definitions and towards working understandings of various concepts for the purposes of communication.

Supplementary resources

The Bellanet Website (http://www.bellanet.org/km/km2) includes slide presentations of the various conference presentations. These provide a graphic display of the salient features of each of the presentations.

Executive Summary

Knowledge Management (KM) refers to a collection of approaches and strategies that have evolved out of the private sector in the context of the emergent knowledge economy. Based on the assumption that knowledge is the foundation for equitable and sustainable development, KM has become increasingly relevant for decision-makers in the development milieu.

A group of five development organisations, including CIDA (the Canadian International Development Agency), DFID (the UK Department for International Development), GTZ (the Deutsche Gesellschaft für Technische Zusammernarbeit), SDC (the Swiss Agency for Development and Cooperation) and the Bellanet Intenational Secretariat, sought to further explore how the international development community could benefit from KM. The coorganisers agreed to focus on European experiences and expertise, while taking advantage of the lessons learned from the KM workshop held in Washington, DC (Feb 2-4 2000), entitled *Knowledge Management – Implications and Applications for Development Organisations*.

The co-organisers jointly funded and conceptually developed the second workshop entitled *Knowledge Management for Development Organisations*. The event was hosted by IDS (the Institute for Development Studies) based at the University of Sussex in Brighton, from June 26-28, 2000.

Over a period of three days, 53 participants from 34 organisations actively participated in a dynamic, interactive event. The audience included senior managers, consultants, and program staff who shared their expertise and organisational experiences. Three objectives were outlined for the workshop:

- To broaden the community of actors from the development community seeking to understand and implement KM strategies within their organisations;
- To increase understanding of the potential of KM as a strategic tool for development agencies; and,
- To validate and expand on the results of the Washington KM workshop.

Workshop presenters, selected from both the private and public sectors, provided contributions that lead to much critical debate, learning and networking. The emphasis on sharing of stories enabled participants to contribute their own experiences in the practical exploration of KM concepts. A professional facilitator guided the participants through these exchanges.

Presenters, identified by the Workshop Organising Committee (see Appendices for biographies), contributed in the following order:

Charles Savage – Knowledge Era Enterprises Steve Denning – Knowledge Management Program, World Bank Nick Milton – Knowledge Transformation International Paul Whiffen - Technical Response Team, Tearfund

Chris Smart - Special Initiatives Program, IDRC

Peter Kibby - TFPL Inc.

Adrian Poplawski - Phoenix Project, CIDA

Micheline Chartrand - Knowledge and Change Management Division, CIDA

Adrian Blundell - Information Systems Strategy and Development, DFID

Louis de Merode - Silver Creek Associates

Steve Glovinsky - Sub-regional Resource Facilities, UNDP

Steve Song - Bellanet International Secretariat

Manfred Haebig - Strategic Project 'Knowledge Management', GTZ

Jean-Pierre Beguin – Regional Operations Support Office, Inter-American Development Bank

Pentti Svdanmaanlakka-Human Resources, Nokia

Gisela Wasmouth - Unit for Organisational Learning, SIDA

Geoff Barnard - Institute for Development Studies, University of Sussex

Lyle Makoskyfacilitated the workshop (see Appendix for biography).

A pre-workshop survey of participants indicated that few KM strategies were in place in development organisations. It also revealed that many organisations were keen to develop such strategies and to learn from others within the international development community about their experiences and plans in this regard.

The workshop agenda was developed by the Organising Committee. The following synopsis corresponds to the themes and sub-themes that constituted the programme.

General highlights:

- Knowledge is at the centre of development.
- Knowledge is distinct from information and is linked to organisational and life-long learning.
- Storytelling and reflection are key components of KM.
- Knowledge-based organisations share knowledge within, across and outside their traditional boundaries mainly through Communities of Practice.
- The creation of spaces for relationship-building and knowledge sharing are a central part of any KM strategy.

Theme 1: Defining Purpose and Strategy

Sub-theme: Knowledge Resource Mapping

- KM strategies should be demand driven.
- KM strategies rely on identifying an organisation's knowledge sources and knowing where they are located.
- There is no set approach to KM. Organisations will undertake different and unique strategies, each developed according to particular contexts and requirements.

- Knowledge mapping is an organisational activity that generates an awareness of where knowledge resides within an organisation and how it is accessed.
- Knowledge mapping can deepen our understanding of how organisations work.

Theme 2: Accessing Knowledge

Sub-theme: Enablers of knowledge access

- Codification and person-to-person strategies enable access to organisational knowledge.
- Technology and facilitation are two key enablers in accessing knowledge.
- Technology has to be used in compliance with organisational needs although new technologies can instigate organisational change.
- Successful knowledge strategies must look outward as well as inward taking into account the need for global documentation standards to enhance knowledge sharing between organisations.
- Communities of Practice are natural phenomena that usually emerge organically to fill communication gaps and process tacit knowledge in and/or between organisations.
- Person-to-person strategies such as Communities of Practice require organisational support and resourcing without being formalised.
- Facilitation and leadership are necessary aspects of virtual person-to-person collaborations.

Theme 3: Fostering Leadership and Culture

Sub-themes: Getting leadership and organisational buy-in

Role of a chief knowledge officer

Creating a supportive culture for knowledge management

- Senior level management and decision-makers have to support KM strategies for them to take root in an organisation.
- Storytelling is an effective tool for securing leadership buy-in.
- KM leadership can help to redistribute organisational power and break down 'silo culture'.
- Learning organisations promote a culture conducive to knowledge sharing.

Theme 4: Fostering Knowledge Management in the International Development Community

- There was enthusiasm for pursuing KM discussions, sharing experiences and learning more about the field in relation to the International Development community.
- There was support for finding meaningful ways of engaging the South on KM ideas, agendas and experiences.

- Significant outcomes included the commitment of specific organisations to take responsibility for sites dedicated to learning about KM, sharing experiences, surveying progress and considering engagement with the South.
- An interest in further KM gatherings was expressed.

Feedback from participants indicated that the workshop was highly beneficial. There was keen interest expressed by the participants for the organisers to hold a series of workshops building on the foundations of the Washington and Brighton experiences. The interest in continuing to learn about KM and engage the South in the process found concrete expression in a series of recommendations.

This report and a range of resource materials are available on the following Website: http://www.bellanet.org /km/km2

Workshop Overview

Background

The Brighton Knowledge Management Workshop was organised based on:

- The success of an earlier Knowledge Management for International Development Organisations workshop held in Washington DC, February 2 4, 2000; and,
- The desire to further engage European bilateral and multilateral agencies in a dialog on Knowledge Management.

The Brighton workshop was designed to build on the exchanges of the Washington experience and to meet the knowledge management interests and needs of the International Development community, with a focus on European experience and expertise. The workshop sought to explore whether development organisations could better meet their objectives through the use of knowledge management models and techniques. Also, it looked at the extent to which knowledge management practices in the private sector could be adapted to development organisations with different perspectives, incentive structures, goals and objectives.

As an initial exercise to map the terrain, an electronic survey was circulated to participants prior to the Brighton workshop to identify organisational activities and needs in relation to knowledge management.

Survey Results

The pre-workshop e-mail survey of participants yielded a response rate of 63%. The question posed was:

Does your organisation have a knowledge management strategy in place?

To this, the vast majority answered "No, but we have plans for implementing one". It seems that most organisations are at the planning, or planning to implement stage. Several have already begun this process. Three organisations answered in the affirmative, saying that their strategies are working well.

The survey results showed that the most significant challenges are those of:

- 1) Making knowledge accessible and usable, and
- 2) Extracting 'lessons learned' and 'best practices'.

Equally significant were:

3) Measuring results to illustrate the effectiveness of a knowledge management strategy,

4) Defining the purpose and focus of a knowledge management strategy in accordance with specific and unique needs. This has to do both with determining goals and ascertaining their relevance to the international development community.

Among the expectations of the participants, the survey showed the following interests

- Better understanding of knowledge management to determine what it is, what it
 means for organisations, different approaches, and the costs and benefits of adopting
 KM.
- Ways in which the development community could learn from each other, with special interest in:
 - Case studies from the international development field;
 - Sharing of experiences, lessons, and good practices;
 - Exploring collaborations;
 - New ideas and inspiration.
- 3) Proceeding with knowledge management.
- 4) State of the art tools and technologies that can be utilised for knowledge management applications.

Themes and Objectives

The following **objectives** were developed by the Workshop Organising Committee in response to the perceived knowledge management interests of the international development community. They were used in the design of the workshop, leading to the development of related themes and pointers.

The workshop objectives were to:

- broaden the community of actors from the development community seeking to understand and implement knowledge management strategies within their organisations
- increase understanding of the potential of knowledge management as a strategic tool for development agencies
- validate and expand on the results of the Washington Knowledge Management workshop

The sponsors agreed that the workshop presented an **opportunity to learn** from each other and avoid the duplication of effort both within and across organisations. There was keen interest in **fostering collaboration** in the development community with an emphasis on sharing experience and learning across organisations.

There was also recognition of the fact that knowledge management is an **imperfect phrase** and that there are preferred terms such as "knowledge exchange" or "knowledge sharing", which numerous organisations use.

In keeping with these objectives, the workshop was designed to **capture** organisational **experiences** from international development organisations in the knowledge management domain. The workshop flow model described below, provided a context for the telling of these stories.

53 participants (including presenters) attended the workshop, representing 34 organisations (including consultants). The workshop was designed with participant interaction in mind. The majority of the participants came from European bilaterals, multilaterals and NGOs, as well as researchers. The workshop aimed to provide a platform for participants to experience the potential of knowledge management as a strategic tool. Emphasis was placed on the telling of stories with participants encouraged to share their stories and ideas. A further goal of the workshop was to consider where the approach could lead in the international development community. Participants were invited to provide their materials during a 'knowledge fair' arranged for the purposes of sharing.

With regard to knowledge management terms and definitions, participants were referred to a range of working definitions provided in the Appendices of the participant resource binder. Special reference was made to certain of these concepts (e.g. explicit, implicit and tacit knowledge) to establish broad understanding. It was acknowledged that the term 'knowledge management' invariably raises difficulties in organisations because it conjures up notions of controlling knowledge. A broader concern was proposed was proposed: namely, the power of knowledge used by people to be more effective, realise objectives and learn from each other.

The workshop themes

The primary goal of the workshop was to foster an understanding of the effective use of knowledge management within the context of international development. This aim gave rise to four themes as outlined below.

1) Defining purpose and strategy

It is important for organisations to be clear, at the outset, about the strategic purpose and benefits of a knowledge management strategy and how it contributes to business and organisational missions. Organisations need to know why they are involved in knowledge management and for what purpose. This theme included an overview of knowledge management, as well as a discussion of knowledge asset mapping, which enables organisations to identify where knowledge is located so that they are able to identify appropriate strategies for accessing it.

2) Accessing knowledge

Organisations should consider two central approaches to acquiring and sharing knowledge. These include a 'collect and codify' approach (explicit, tangible knowledge) and a 'person-to-person and connect' approach (usually dealing with Communities of Practice). The 'enablers of access' include supportive technologies for collection and codification, as well as facilitation of communities of practice.

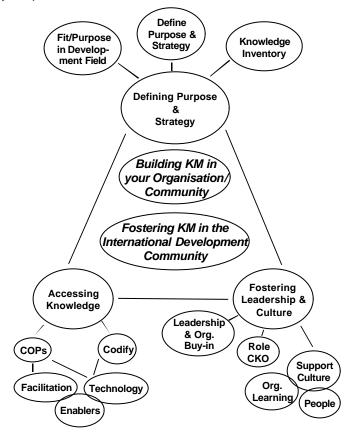
3) Fostering Leadership and Culture

Leadership buy-in is critical to ensuring the effectiveness of any knowledge management strategy. This theme entails fostering an organisational belief system and culture that encourages enthusiastic commitment to a knowledge management approach. It deals with identifying appropriate frameworks, structures, skills and processes that will support knowledge management strategies.

4) Fostering Knowledge Management in the International Development Community

Aspects continuing to learn about knowledge management and engaging the South in this process. This theme considers ways of achieving these goals. Various strategies, such as nurturing a community of practice and surveying organisational progress, are dealt with.

Key subjects per theme:



Workshop design

The themes provided both the framework for discussion and structure for the three days. The proceedings were interwoven with facilitation sessions preceding each new theme. The keynote addresses also helped frame discussions and set the tone of the workshop.

Each day explored one of the themes and various sub-themes in the following order; the final day of the workshop dealt with Themes 3 and 4:

1) Theme 1: Defining Purpose and Strategy

a) Knowledge resource mapping

2) Theme 2: Accessing Knowledge

- a) Enablers of knowledge access
 - i) Technology as enabler
 - Knowledge collection/codification approaches
 - ii) Facilitation as enabler
 - (1) Communities of practice
 - iii) Other enablers

3) Theme 3: Fostering Leadership and Culture

- a) Leadership and organisational buy-in
- b) Role of a chief knowledge officer
- c) Creating a supportive culture for knowledge management
 - i) Supporting organisational learning

4) <u>Theme 4:</u> Fostering Knowledge Management in the International Development Community

Presentations addressed each theme through experiences and stories from both development organisations and the private sector. On the basis of these stories, questions were asked about real problems in the development of knowledge management strategies. This approach allowed participants to think critically about the feasibility of applying various knowledge management strategies to their organisations.

Workshop methodology

To facilitate participant interaction, people were arranged in groups and seated around tables. Group work was built into various sessions to ensure active participation. As an example, Charles Savage's keynote included a team exercise designed to allow participants to grapple with some of the key issues he raised in his presentation.

Discussion slots were provided at the end of presentation sessions to allow participants to pose questions and comment on the various experiences brought to the workshop.

Participants were provided with workbooks, background articles, the facilitator's notes and most of the presenters' slides. These aids helped people work through the conference.

Workstations were provided for participants to attend to email, as well as to show Websites and organisational business to others.

A number of time slots were set up to allow participants to demonstrate particular initiatives of interest.

The entire workshop proceedings were recorded and are held by Bellanet.

Keynote Presentations

The development of knowledge management and why it is important - Charles Savage

"Knowledge is as much about head as it is about heart" - Charles Savage

Charles Savage embraces a trans-disciplinary approach to knowledge management. He draws on wide-ranging perspectives to convey his thoughts on what knowledge management is, where it is situated historically, and what its current trends and approaches are. His influences include the spiritual realm, from which he cites Saraswati (the Indian Goddess of Knowledge) to illustrate the high spiritual regard for knowledge in ancient cultural system, metaphysics, and organisational experiences showing that companies can protect and/or distribute knowledge. Savage brings these various strands together to state that knowledge is not simply an organisational entity that can be packaged or easily defined and understood. He proposes instead that we have to think creatively and differently within organisations in order to work with this dynamic entity called knowledge.

Synopsis

- Knowledge is significantly intangible, residing in people and emerging through their interactions and exchanges.
- Companies deal as much in knowledge as in any other commodity and their profits are measured by what knowledge is generated.
- Organisational learning which promotes consciousness of how learning happens and how knowledge is generated is key to organisational development.
- Values that promote exchange, the sharing of stories, and a sense of community and trust will enhance knowledge generation and flow.

What is knowledge?

According to Savage, knowledge is not only about using information but it is very much premised on and formed by the special, unique interactions that take place between persons. **Knowledge resides within each of us**. It cannot be learnt from a book but is given expression in action and through action. In this way, he draws an implicit distinction between knowledge and information: while libraries are valuable stores of information, they lack the element of interaction and engagement that generate knowledge. This human dimension of knowledge is what Savage calls '**spirit**' and in keeping with spiritual symbolism, he asserts that knowledge has heart. As people become more conscious of themselves and their interactions with others, spirit develops between them and it is this spirit which is at the centre of knowledge creation and sharing.

An exercise to get people talking knowledge

To enhance discussion between participants, teams of two were formed to discuss a scenario in which one is about to embark on a new project within an organisation. This person has the business acumen and money to fund the project. The other person is what Savage calls, a "knowledge angel" with complete access to all of the organisation's knowledge. The knowledge angels are tasked to help their partners with their new project by transforming the ways in which they use knowledge in their organisation, connecting

with their clients and drawing upon resources. The knowledge angels tells their partner how they should use the knowledge assets of their organisation to be even more successful. They advise their partners how to better use their capabilities to realise their aspirations.

The teams are encouraged to think creatively about how to use not only their own knowledge within their organisation, but that of their client communities to help them become more successful.

By considering the relationship between capabilities and aspirations, the teams identify ways to enhance their projects through effective use of the organisational capabilities as outlined by the knowledge angel.

Discussing knowledge management

In keeping with the general tone of the workshop, Savage suggested that the term knowledge management is probably not an ideal one and that part of its conceptualisation is tied up in industrial-age thinking which suggested that knowledge, like information, is something which can be packaged and controlled. On the contrary, he argues that once you become involved in the knowledge business, there is so much more to the generation of explicit or tangible knowledge. Savage drew on the experiences of the whaling industry to illustrate the historical precedents of knowledge management: the captains shared goods, spread expertise among their crew (knowledge became diversified in the fleet), and determined the split of profit shares before the trip. The foundations for these practices within the whaling industry included **trust and openness** and the **active sharing of knowledge**. His point is that there are a number of knowledge management practices, (e.g. team learning and sharing of ideas) already residing within organisations which need to be affirmed.

Savage also suggested a move beyond Cartesian thinking which encouraged an understanding of the components of systems and a mechanistic approach to life, work and thought. He proposes that instead of remaining fixed on the definition or understanding of knowledge, we become more concerned with uncovering the knowledge creation process.

The evolution of knowledge management

In identifying the historical emergence of knowledge management, Savage drew a distinction between the industrial and knowledge ages in the requirements of, and effects upon, workforces. He argued that the industrial age focussed on taking matter and adding value to it whereas the knowledge era attempts to generate value with matter and ideas. His notion that people matter in the knowledge era was challenged and he agreed that this is as much a wish as a reality. The industrial age promoted self-interest: people had to do what they were told and had to leave their feelings at the door. Today, people are being asked to bring their feelings and hearts into their work. This feature is what allows people to be enthusiastic and involved. It also ensures that organisations cater to the needs of their personnel rather than expecting them to perform without feeling valued. The whole human being is brought into the workplace encouraging a holistic view of how organisations work.

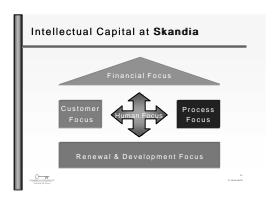
Current Practices and issues pertinent to knowledge management

Various technologies which been developed to facilitate knowledge management and enhance intangible knowledge assets like intellectual capital which reside in organisations. Savage raised the issue of **values** and how organisations need to be clear about their values working in the knowledge realm. He posed the question of whether or not one can

create knowledge without values, and proposed that organisations be conscious of where these values come from and how they are reinforced.

In the knowledge age, because organisational profits are generated in **learning** rather than as financial profits, organisations should affirm events that foster learning. This is the currency in which they should be dealing. As organisations encourage their personnel to learn, share and reflect, they create an environment for people's organisational ideas to flourish. Herein lies a company's value. Yet, the quality and level of dialogue and conversation within private sector organisations is often poor.

Savage suggested that it is often what you cannot see in an organisation: how it learns, listens, and **dialogues** that is key to an organisation's knowledge business. He emphasised the importance of co-creating knowledge and refered to the Skandia example. Here, the human focus is at the centre of intellectual capital with an emphasis on co-creating the future with partnerships between organisation-based individuals and communities.



Partnerships are premised on shared and common interests which are overlapping, rather than being separate as in the industrial era. The world of eBusiness is changing the ways in which organisations are working and dealing with knowledge.

Transition to the World of eBusiness and eDevelopment

	Industrial Business	ebusiness
Strategy	Predict	"Anticipation of
		Surprises"
Technology	Convergence	Divergence New ways of working together
Management	Compliance	Self-control self- organising communities
Knowledge	Utilisation	Create & Renewal sense and respond
Assets	Tangible	Intangible Knowledge intense
Organisation	Structure	Edge of chaos Co-creating the future

(Savage, 2000: Brighton workshop presentation).

The new environment changes the time—space dimension, the nature of organisation, as well as the ways we work, operating on the edge of chaos in which we are caught between controlling the known (a feature inherited from the industrial age) and discovering the unknown. At the same time though, Savage explained that among the myths and misconceptions of knowledge management is the belief that the new technologies are more than a tool to connect and facilitate change in a broader context of human direction and connectedness.

Knowledge management allows us to embrace the human dimension of knowledge creation and to restore a sense of **community** and meaning in our lives. The rehabilitation of the concept of community encourages us to think consciously about the ways we use human potential and the ends to which we direct our efforts of co-creation. Communispace (www.communispace.com), a Website developed in Cambridge, exemplifies these points by bringing together values, purpose, and roles in an organisation through the **telling of stories** Savage recommended the Communispace approach to knowledge development because it deals with the intangibles, including the implicit aspects of organisation such as mood and integrity in developing dialogues that enhance the ability to achieve mission.

Resources:

Charles Savage's biography: see Appendix.

Cottrell-Boyd, M (n.d.) The Deadliest Sins of Knowledge Management: a federal government in perspective.

Prusak, L. (1997). "People Power." think leadership - International Business Machines Corporation. http://www.ibm.com/ibm/thinkmag/articles/pplpower/

Knowledge Management at the World Bank - Steve Denning

Knowledge sharing is untidy, it requires a new mindset, and it works" - Steve Denning

Program Director of Knowledge Management at the World Bank, Steve Denning presented the World Bank experience as one story of how people could develop knowledge management strategies within their organisations. Having occupied various positions in the World Bank over a number of decades, experiencing different aspects of the organisational process and culture, he underlined what he called the 'P' word – passion – and people, as driving the knowledge management process.

Synopsis

- Knowledge rather than money is at the centre of development.
- Knowledge is about learning to learn faster rather than about expertise.
- Sharing know-how within and across organisations, through communities, is key to the work of development organisations.
- Storytelling is the most effective way of growing knowledge-based organisations.
- The basics of knowledge management include strategy, organisation, budget, personnel, incentives, community, technology and measurement.
- Certain universal laws of knowledge management appear to be emerging. These
 emphasize knowledge sharing, communities of practice, passion, storytelling and the
 integration of knowledge management into the core business of an organisation.

Denning talked about the World Bank's history as a change resistant organisation. He explained how it has shifted from its disregard for knowledge management to recognising how knowledge sharing has aided decision-making, becoming part of the core business of the organisation. Knowledge work became a means towards solutions and progress, presenting new, innovative ways of working. Moreover, it posed solutions that benefited the World Bank's clients.

Denning emphasised the importance of seeing knowledge sharing not simply as a way of doing the same thing differently, but a whole different way of viewing organisations. He agreed with Savage (refer to the previous presentation) that while in the past organisations were keen to get people to leave their emotions out of their work, increasingly, organisations are sensitive to the value which humans bring to their processes and products. For this reason, people are being encouraged to bring their "whole person" into work. This necessarily introduces chaos, and lack of control and structure to the workplace. Denning encouraged all thinking organisations to become comfortable with these changes to the ways of working in the past.

The World Bank story

A bit of history

In 1996, the World Bank management asked Steve Denning to look into the area of information and knowledge and what this growing trend meant for the organisation. At this time, the Bank had no commitment to look at this area, regarding itself as a money-lending

organisation. There was no budget, no incentive to developing a knowledge component to the business, and certainly no strategy to achieve this. Today, most of this has changed with various elements in place to promote knowledge management within the World Bank.

The question which Denning poses is: "How did this notoriously change resistant organisation become involved in the area of knowledge"? He answers it quite simply by saying that it was through dialogue and conversation, essentially through story-telling that the World Bank came to adopt knowledge management as a key organisational area.

The World Bank Today

The World Bank's main activity has been that of lending. It lends some \$15-30 billion a year, receiving profits of about \$1 billion a year. Knowledge management has become a strategic thrust with its 1999 Mission statement including the goal:

"To help people help themselves and their environment by providing resources, sharing knowledge...".

In fact, the World Bank is regarded as a leader in the knowledge management arena. In 1996, the World Bank was drowning in information and even though it was spending a fortune on classifying all this knowledge, there was very little information flow within the organisation. At this point and against this backdrop, Denning started the task of learning to use the organisation's information AND share the organisation's know-how, both within and beyond the organisation. He tried to persuade management that this was a good idea. He used the Nonaka "The Knowledge Creation Organisation" chart which depicts the knowledge spiral, but soon realised that managers didn't relate well to these tools and couldn't grasp what he was trying to convey. Even the Brint definition², which is quite detailed, didn't help. He found that a dialogue provided the context to persuade people. So he used experiences to show management the effective use of information being provided to the developing world – a process from which the World Bank was absent. One of the stories he used to depict the world of information flow was the following:

In June 1995, a health worker in Kamana, Zambia logged on to the Center for Disease Contril Web site in Atlanta and got the answer to a question on how to treat malaria. This happened in a small, remote town in Zambia, not the capital and as early as 1995.

Two key points to emerge:

- The World Bank realised that it was unable to share its information in the same way as CDC; and
- 2. Denning realised that examples and stories which people could relate to entered their consciousness and made an impact on them.

Denning discovered through sharing this Zambian example that it was mainly through storytelling that one person was able to reach and persuade many. The World Bank realised that it was through passion that people were achieving results that mattered in the developing world, but they continued to question the concept of knowledge management. They chose to use the term knowledge sharing to distinguish their work from yet another management or IT fad, believing that this was indeed a better way of doing the organisation's business. As their knowledge sharing concept and practice evolved, the

¹ For a more detailed discussion on storytelling, refer to a later presentation by Denning as part of the panel on Getting organisational buy-in (cf. Theme 3).

² "Knowledge Management caters to the critical issues of organisational adaptation, survival and competence in face of increasingly discontinuous change" (www.brint.com).

organisation shifted its focus beyond its initial notions of developing knowledge bases to that of knowledge communities.

Again, stories helped to convince World Bank management:

The Pakistani Story

The organisation's commitment to knowledge management grew steadily until August 1998 when it seemed that the financial world was falling apart at the seams. Many in management wondered why the World Bank was concerned with knowledge rather than with money.

At this time, Denning made a presentation to senior management to speak about why knowledge was important. He used another real example: the story of the World Bank's response to the Pakistani Government's request for advice on premature highway failure and different technologies that could be used to remedy this problem. The request was made all the more urgent by the fact that the government was taking a decision on this the following week. In the past the World Bank would have sent a team to produce a report with due process of research, consultation, collation and verification to address the request, but their advice would have come too late to solve a pressing problem. Instead the team contacted the community of highway experts in the field (about 300 persons) inside and outside the World Bank via E-mail to ask for help. There were many responses from countries including Jordan and Argentina addressing the problem. Also, there were responses from those outside of the World Bank, such as the South African Highway authorities response pointing to the New Zealand experience in this area. In this way, the World Bank was able to present a client with a slice of the global experience to address specific problems in Pakistan. The experience was edited for re-use and put into the knowledge base of the organisation so that any client would have access to this material.

Through this experience, the World Bank realised that the new technologies are facilitating the kinds of operations that add value to their work. Bank staff saw that expertise is shared across regions in ways that do not make people in leadership positions feel exposed for not having immediate solutions to problems that emerge. Staff also became exposed to the tremendous value and potential of knowledge communities.

From this experience, the World Bank was able to extract the following lessons:

- Knowledge sharing is premised on the evolution of knowledge communities or communities of practice,
- Knowledge bases are simply by-products of building knowledge communities,
- The external partners of these communities are crucial, helpful and energising members.

Communities of Practice³ in the World Bank

Denning used a flesh and bone analogy of the human anatomy to explain that knowledge communities are to the World Bank like muscles that energise the organisation's skeletal frame (or structure). He argues that an organisation needs both structure and muscle in the right combination for agility.

³ The Communities of Practice presentation by Louis de Merode, deals with communities of practice in more detail (cf. Theme 3).

The experience of the power of knowledge communities has led the World Bank to think globally with an interest in developing a network of learning communities or **thematic groups**. Presently there are about 100 of these which link people across regions and business units. The thematic groups include external partners. The World Bank has created **sector boards** to manage the thematic groups and connect them to the other structures within the organisation. The sector boards collect good practice, build up the thematic groups, and provide advice to staff.

The World Bank has been developing its thematic groups for over three and a half years. In 1996, there were a handful of these communities in place. By June 1997, a substantial budget was put in place for knowledge management as the importance of the thematic groups became increasingly evident. At this time, the budgets for these groups were still handled by line managers. By September 1997 there were about 25 communities across the organisation. In January 1998, funding was provided to thematic groups directly via the newly constructed sector boards. By February 1998 management agreed to change the personnel system of the World Bank so that knowledge sharing became one of four core behaviours across the organisation that staff were evaluated on annually. By the middle of 1998, the budget began to flow from sector boards to thematic groups with more than 100 communities in place. By early 1999, the organisation recognised the upsurge of sprawling communities as an untidy development and looked for expertise from outside their organisation to help them develop knowledge management strategies that would make things look more structured and less chaotic. These experts included people like Larry Pruzak and Bob Hoebler who thought that the thematic groups were the heart and soul of knowledge sharing in the organisation. They advised the World Bank to support and nurture these communities. On the basis of this consultation, management relocated Denning's unit from the computer department to the operations department.

In January 2000, knowledge management at the World Bank was again under threat because the organisation was downsizing and reducing its budget. However, it survived and was once again endorsed as one of the four key pillars of the organisation for the next five years. It was recognised that the World Bank's thematic groups are increasingly the heart and soul of what is becoming a knowledge sharing organisation.

The seven basics of knowledge management

Denning then explained how this 'victory' for the knowledge sharing community has been achieved, based on "the seven basics of knowledge management" (refer also to the Washington Report for a discussion of these.)

- Strategy
- Organisation
- Budget
- Personnel incentives
- Community
- Technology
- Measurement

Strategy

Organisations need to make decisions about **what** they are trying to do, to determine what knowledge should be shared. The World Bank chose to focus on the know-how in the organisation, i.e. what works and what does not work in development. Organisations need to decide **who** to share this knowledge with, i.e. whether only inside or outside of the organisation. Denning proposed that in the development world, it is important to share this information outside of the organisation. Also to be considered is: **how** to share the knowledge, i.e. by electronic means or in person.

Finally, he proposed that many organisations are not taking top-level decisions to share knowledge. Top level endorsement is important because knowledge sharing implies working across silos which are usually present in vertically structured organisations.

Organisation⁴

The pattern of a small, centralised group of people with highly decentralised implementation seems to work well. The centralised unit has to become part of the way the organisation does its business. There is no perfect solution for locating such a unit, but any foothold is important – even location in the computer department. Communities of practice are the basic tool for sharing know-how with some capability to make decisions with reach across the organisation.

Budget

You cannot do knowledge management without a budget and senior level endorsement ensures that monies are committed to knowledge sharing. A knowledge management budget assumes that an information infrastructure is in place through which knowledge can be shared.

Incentives:

There are only four core behaviours that people are evaluated on in the World Bank and knowledge management is one of them. People are assessed for how effectively they have shared their knowledge and know-how. When personnel realise that knowledge management is now seen as here to stay, staff better understand that knowledge sharing is part and parcel of their work.

Community

Community is central to knowledge management. The Bank asked people what issues were important to them in order to build communities around these issues. When people who are passionate about them identify these issues, communities survive. Dictatorial approaches that preach what the issues are do not work. An important aspect of communities is that people should meet face-to-face. Then people can scatter over the world, but they should meet from time to time.

There are parts of organisations where communities of practice do not work: what Denning calls the incorrigibles. It is important to understand why these groups do not work so that lessons can be learnt and problems remedied. There is also a need to account for monies spent in areas that do not deliver.

Technology

The best technology for interaction is still face to face communication, however it is expensive for distributed organisations. E-mail is an effective means through which people can communicate while the Web can accelerate this scale of operations across the world. Through information and communication technologies, people network and get to exchange views and create know-how that flows into operations. New networks develop and new know-how is developed and exchanged.

⁴ With regard to where knowledge management initiatives are located within organisations, refer to "What is a chief knowledge officer", Theme 3.

Measurement

Measurement is an important way of convincing management that knowledge sharing is an effective way of working. Management relates to metrics that account for outputs in relation to the inputs so it is important to produce data, information and reports that show whether or not the organisation is benefiting by knowledge management. It is not always easy to identify what exactly the inputs are or how to categorise them. For example, it may be difficult to separate knowledge sharing from the actual work that is done. Still, undertaking evaluations for feedback to include in reports is important. External validation is an important way of convincing management of the value of the work being done.

Universal Laws of knowledge management

According to Denning, the following are 'laws' that appear to be emerging across all organisations involved in knowledge sharing. They seem applicable to all organisations.

Law 1. Knowledge sharing is key to organisational survival. It is not a question of whether or not to share knowledge, it is a question of how.

Law 2: Communities of practice are the heart and soul of knowledge sharing. They are messy and disorderly and change the nature of organisations. In this respect they can become threatening to management, but they are key.

Law 3: Passion is what drives communities of practice. The passion of the individuals in these communities is crucial to making things happen. Qualified commitment does not achieve what passion achieves.

Law 4: Knowledge sharing is at some point confused with information technology. An engineering (IT) and an ecological (knowledge sharing) approach to doing business are very different. Denning suggested that we need both the engineering and ecological approaches but that the structural way of doing things can be upset by communities that are by their nature chaotic, unorganised and dynamic.

Law 5: Middle management resists knowledge sharing because they have built their careers on control vested in vertical structures and knowledge management drives horizontal highways across the organisations.

Law 6: Storytelling inevitably emerges. Abstract agreement and storytelling can be contrasted since the former can be aggressive or inherently combative as opposed to the latter which is unimposing and more collaborative. Storytelling allows people to invent something together and is lot more like dancing than being in conflict.

Law 7: Knowledge management is a way of doing the organisation's business. Staff share knowledge to get their work done. Contrary to a building blocks approach (first data, then information, then knowledge) knowledge sharing suggests determining first what decisions need to be made and what action needs to be taken and then what knowledge you require to take these actions. If organisations are able to work from the needs and inputs of their clients, this drives the knowledge sharing process.

In closing, Denning invited people to join up to make this vision of building a development process which is based on knowledge sharing a reality.

Discussion:

Q: You don't mention what has to be changed from old practice in organisations, especially with regard to the evaluation components of organisations. Should you change the evaluation department in your new knowledge strategy?

A: The World Bank's evaluation department has produced a vast number of reports, but they are filed in a library where they are not used. As a way of transferring knowledge, writing reports about what we learn is not a very effective way. But report writing is slowly being replaced by the sharing of knowledge that is happening in communities. Management is now encouraging their evaluation and research departments to join the community of practices to become part of knowledge sharing activities.

Comment: The Global Development Gateway

This is an idea of taking further the sharing of know-how at the World Bank and making it available on the entire Web. The view is that of using the Web to co-ordinate initiatives and find out what is happening in different places, across time and space. The interest is in sharing not only know-how globally, but building gateways on any conceivable topic. The team that has been working on this is trying to find out what this would cost and whether or not this is a feasible idea. The initiative will only survive if it is a real partnership. It would have both a global and country aspect. This is a much larger vision than what has been presented.

Comment: Relations between development organisations and their clients: who is doing the learning?

One of the remaining challenges seems to be that the people doing the learning are not the poor and the disadvantaged. At Action Aid, they've looked at accountability and reporting systems which address the fact that the way in which reports are compiled at present puts the burden on communities to produce metrics and reports which don't necessarily benefit them but which answer the requirements of funders. There is an attempt to invert accountabilities so that communities become more familiar with and conscious of their own learning and produce 'reports' that are of value to themselves. The burden is then shifted to the development organisations themselves to make sense of their communities' reflections and to uncover the know-how embedded in these newly fashioned reports.

Q: How do you put poorer communities at the centre of their own learning and reflecting, and at the centre of this process of development?

A: We do have to find ways of nurturing this idea and doing it better. We must acknowledge that there are already learning communities in place and have to build on what already exists, and not destroy this in any way. Working in a hierarchical fashion will not work. The choice between an engineering and an ecological viewpoint is a fundamental one to ensure that the language, concepts, processes and organisations we use are consistent with what it is we're trying to achieve. If they're not, we will fail.

Q: How are you dealing with E-mail to do your work and how are you supporting and nurturing communities with which you are working?

A: There are ways of preventing an explosion of E-mails by, for instance, not having any one person receive all of the E-mails. By developing expert groups there are ways of containing E-mail. But again, this relies on people who are committed to and passionate about their subject.

Comment: Hierarchical methods of nurturing communities of practice do not work. Building the communities around the issues that people are passionate about is very important. Where management intervenes too strongly by controlling what the community focuses on, the community falls away. So finding ways to operate in this ecological mode by indirectly encouraging people to follow their hearts and passions is important. The World Bank has learnt that it must find time and the budget to:

document experiences and exchanges;

- allow people to meet face to face, and
- allocate monies to things that people are really interested in pursuing.

We have to find the linkage between people and the organisation. If you bring people inside an organisation and allow them to do things as part of their work, they then can have a tremendous impact. The communities cannot get going unless they are linked to the organisation. But in supporting communities, you have to respect their autonomy.

Resources:

Stephen Denning's biography - see Appendix

Denning, Stephen. What is Knowledge Management? World Bank Knowledge Management Board, 1998. A background paper for the World Development Report. Available: http://www.apgc.org/free/whitepapers/index.htm

Knowledge Management: implications and applications for development organisations, 2000, Washington Report. Available:

Defining Purpose and Strategy

Overview of Purpose and Strategy - Lyle Makosky

Defining Purpose and Strategy

The questions that become key in defining purpose and strategy cover three areas:

- 1) Having a sense of where your knowledge sources are located, whether in people, ideas or documents;
- 2) Having a sense of purpose for which you want to use these knowledge assets;
- Knowing what strategy to undertake in order to identify, enable, acquire and share the knowledge assets.

Knowledge-based decision-making

Makosky used Denning's model of a demand-driven strategy as an example of how to define the knowledge requirements of an organisation in keeping with the decisions and actions the organisation wants to take. On the basis of this approach, the ways in which information and data may be most suitably organised become clear. In this model, the knowledge requirements dictate the scope, collection and codification of information and data gathered, and additionally, suggest how access to this information and data will best be attained.

In addressing the above questions, a number of different ideas and practices were presented through case studies. These vary in scope portraying different tools and ideas that may or may not be applicable to organisations.

The first question was addressed by looking at knowledge mapping and knowledge audits that are analytical tools used to serve certain kinds of purposes.

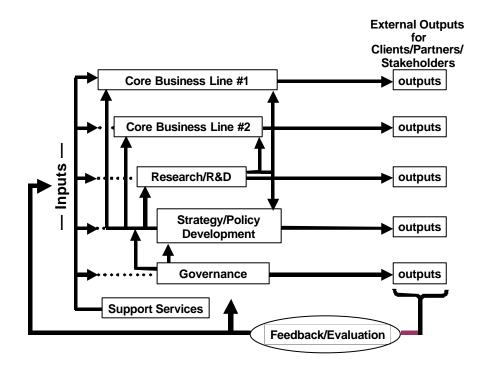
The purpose to which knowledge management could be put in an organisation was considered by way of presenting models which support business, add value and support organisational learning.

The strategies used to identify, enable and share knowledge assets were addressed by looking at 'collecting and codifying', 'connecting people-to-people', and 'creating enabling environments'.

Understanding business/service lines

In guiding the workshop through thinking about knowledge management in relation to their organisations, Makosky referred to certain business models that enable consideration of the decisions and actions for which knowledge is required. An International Development Business Model identifies inputs, organisational processes, and outputs. In turn,

Inputs refer to the knowledge based sources or suppliers and can be determined by considering 'who' provides and 'what knowledge' they provide. Organisational processes refer to the critical end-to-end processes that generate the key outputs of the organisation. These can be defined as the key business or service lines of the organisation and can be pictured as a flow of connected activities.



 Outputs are the deliverables or services provided and can be either externally or internally directed at clients and/or stakeholders.

Based on the above slide, Makosky explained that the primary organisational processes comprise the key business or service lines of the organisation:

- 1) Core external business line develops and delivers the organisation's key services which meet client or stakeholder needs;
- 2) Core research line engages the necessary research and development to inform service development. This process can also constitute a core external business line;
- 3) Internal strategy and policy development line develops the strategic direction of the organisation. This process draws on both external and internal inputs and defines the necessary policy framework to guide implementation of strategy as well as quality assurance;
- 4) Internal administration manages the resources of the organisation that are usually split into 'Governance' and 'Support Services'.

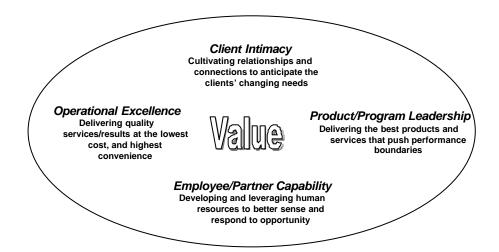
The above slide also suggests that the inputs to the organisational processes are provided by feedback from the impact of the organisational outputs and the internally oriented outputs. For example, the 'Strategy and Policy Development' line produces an external

output which may consist of the organisation's public global policy and priorities, as well as an internally oriented output which may offer strategic guidance on organisational focus and direction.

The Value Proposition

A further model that Makosky offered organisations to assist them in thinking about knowledge management is 'The Value Proposition'. This depicts the value offered to clients or stakeholders when the organisation's mandate is presented and the service is delivered. Organisations base their business on one of the following four types of value propositions which are the intended drivers on which the organisation builds its success. These value propositions suggest to clients areas where the organisation offers excellence:

The Value Proposition



Each of the above value propositions have different implications for the organisation's knowledge management purpose and benefits:

In terms of the client intimacy value proposition, the organisation has to:

- Improve awareness and understanding of clients
- Improve responsiveness to clients
- Ensure that it remains relevant
- Increase flexibility to tailor approaches to client needs.

In terms of the **product/program leadership** value proposition, the organisation has to:

Increase innovation

- Ensure that it remains relevant
- Support leading edge thinking and service development
- Increase the quality of products and services.

In terms of the **operational excellence** value proposition, the organisation has to:

- Reduce the costs and process cycle time by employing best practices
- Increase efficiency
- Improve decision making

In terms of the **employee/partner capability** value proposition, the organisation has to:

- Strengthen staff or partner skills and methodology
- Enhance links to and use of partner knowledge and experience
- Foster staff and partner creativity and service quality enhancement.

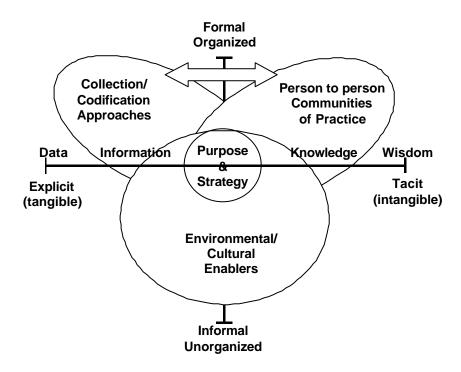
Different knowledge sources - selecting different strategies

Makosky referred to the distinction between explicit and tacit knowledge to show how their different characteristics lead to different attributes. Explicit knowledge is usually available and documented in best practice models which are replicable, as opposed to tacit knowledge which is usually built in networks and available in communities of practice. Another way to think about knowledge management is by building a learning organisation which can problem solve through the interactions of people within and beyond the organisation. Both explicit and tacit knowledge could be inputs to learning organisations.

Makosky suggested that in thinking about defining the purpose and benefits of a knowledge management strategy for an organisation, the following questions could be posed:

- How will knowledge management support and enable the business model? Is knowledge management a better way of doing business?
- Could knowledge management support any of the core processes or service lines in terms of the external business lines, the research and development line, the strategy and policy development and the internal administration line?
- How could knowledge management support the value proposition of the organisation?
- How can knowledge management support learning in the organisation?

In mapping how these various strategies hold together, Makosky used the following diagram:



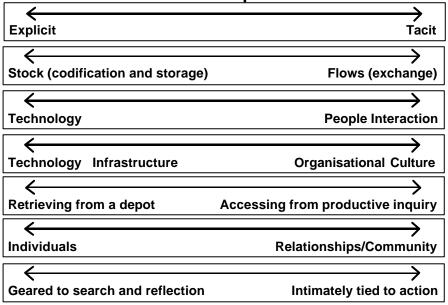
The various strategies show that the central concern in each of them remains the purpose of a knowledge management strategy.

Key dimensions of a knowledge strategy

Makosky suggested that it is helpful to contemplate the most important drivers within organisations to yield a sense of whether there is a tendency towards the codification or the person-to-person approaches. These strategies are seldom exclusively adopted within organisations, but an awareness of the ways in which they are being used and how effectively they overlap could help with tweaking strategies for maximum benefit.

The following table helps identify an organisation's leanings in terms of approaches being used:

...the key dimensions of knowledge strategy What is the most important driver?



Finding the correct balance between the two approaches helps tailor the knowledge management strategy. As Hansen et. al. warn: "Some companies automate knowledge management; others rely on their people to share knowledge through more traditional means. Emphasising the wrong approach – or trying to pursue both at the same time – can quickly undermine your business" (Harvard Business Review, March-April 1999: 106).

Case study on defining purpose and strategy: The British Petroleum story and its adaptation at Tearfund - Nick Milton and Paul Whiffen

Nick Milton and Paul Whiffen took the workshop through two case studies of knowledge management. They share a common background in British Petroleum (BP) – Milton as Knowledge Manager for the knowledge management team, and Whiffen as a navigator who stumbled upon the value of knowledge management in his work.

Their talk dealt with the transfer of knowledge and learning. They did not attempt to define knowledge management, but to convey a sense of the history of KM in BP. They did this by looking at how they manage knowledge with specific tools and techniques. A focus on Tearfund's adaptation of the BP experience showed how a model has been taken from the private sector to the development sector.

Their approach recognised a common organisational concern, that of avoiding mistakes and/or repeating them. They suggested that duplication usually occurs when organisations work in crisis mode or because new staff deal with problems that have been dealt with before, and the experience or knowledge resides in teams or individuals who have moved on.

Synopsis:

- Learning to reflect and learn within organisations is key to benefiting from know-how and experiential knowledge.
- The power of stories in generating organisational support for knowledge development is evident.⁵.
- The Learning Review approach (learning before, during and after) provides a powerful means through which both BP and Tearfund are better able to understand, process and improve performance and service.
- One of the common spin-offs of the Learning Review process is the emergence of communities of practice.
- The use of specific actionable recommendations (SARs) which are generated in the 'learning after' phase helps organisations respond efficiently to disasters.
- By fostering a learning culture, organisations perceive the value of learning and using knowledge to do their business better.

Distinguishing data, information and knowledge⁶

Milton sketched differences between data, information and knowledge by telling a story.

The Head of your organisation contacts you to summon you to an urgent meeting in Almaati (capital of Kazakhstan). You find out about how to get to the meeting by taking a taxi to the airport. There are lots of pieces of data presented on the boards you consult, but they are of no use to you because none of the flights scheduled on the boards go to

 $^{^{\}rm 5}$ see Theme 3: Getting leadership and organisational buy-in.

⁶ For further discussion of this, please refer to both the Kibby presentation in Theme 2 and the Distinguishing information and knowledge Appendix.

Almaati. For more helpful information you approach the information desk. The information officer informs you of four different ways of reaching Almaati but you still don't know which of these is the best option to chose. You have information, but you also still have to make a decision. A man standing next to you offers you advice about the best possible route based on his experience as he travels to Almaati all the time. What he is offering is knowledge.

On the basis of this story, Milton made the following points:

- You need data and information before knowledge is of value,
- Knowledge adds a human dimension to information,
- Knowledge enables you to choose the right thing to do provided that you trust the person giving you the information. Based on this observation, he suggested that trust and friendship are often the basis of knowledge.

But what is knowledge management? He used the analogy of water by saying that you need water for a tree to grow, but water trickles through your fingers. Yet if you build reservoirs, you can contain water and allow for it to flow. Similarly, if knowledge is contained and you make maximum use of what your organisation knows, it can be used to grow organisations and to foster development.

About BP

Even though the BP company may be much larger than most at 60,000 people in 120 countries, it is a flat, federal organisation committed to sharing and applying knowledge. Its experiences and techniques are scalable. The company's strategies are set in very simple terms to improve on the ways in which they do things irrespective of the changing context. They are committed to doing things better based on their experiences and those of others.

In 1996, BP decided to learn from the United States Army which was experimenting with knowledge management. John Henderson told top BP people a story that captured their attention. It was a story about someone going out to do a piece of work and needing information to do it. The person tasked had no prior experience of the task, but could tap into the knowledge networks of his organisation to undertake the task successfully.

Because BP could relate to the story, they decided to adopt a knowledge management approach by putting in place a small, centrally-funded team with a program that would lead to integration of knowledge management into the organisation's business.

Holistic knowledge strategies in BP

In adopting a **holistic approach** to developing knowledge management strategies, BP discovered that the major **barriers** to sharing knowledge were **culture** and **people's** behaviour. To move forward with knowledge management, they adopted a project-level process: **learning before**, **during and after** to help turn their goals into results. Milton proposed that this approach works well for organisations making changes. At the beginning of a project, people who know something of the field are brought in to share their expertise. During the process, brief focus meetings are held to identify what is known and then, at the end of the process, meetings are held to identify what has been learnt and where to take this learning. The know-how is kept for further review and future reference and the process through which the knowledge was accrued usually gives rise to **communities of practice**, which extend their life-span.

BP mainly used E-mail and the Web to facilitate this work, and purchased a system that invites people to input their expertise and tacit knowledge for purposes of allowing others to tap into their know-how. At present, this yellow pages (which is voluntary in that people chose to enter their information) has about 18,000 entries providing access to the various experts within the organisation.

Milton explained that the kinds of changes introduced helped BP to learn within the organisation by drawing on the knowledge base of the organisation. The company applied the knowledge management model to real needs within the organisation (a refinery turnaround project) and produced user-focused knowledge resources (similar to databases). In this way, the organisation could achieve its mission of doing things better the second time around.

Tearfund's application of the Learning Process model

Paul Whiffen joined Tearfund about fourteen months ago (in April 1999) to help the organisation manage its information and develop a knowledge management strategy. The BP model was adopted with special emphasis placed on the 'learning after' part of the learning process to show how past experience could help with shaping future plans and actions. The point of this emphasis was to show how this kind of learning could benefit the organisation. The Bangladesh floods were used as the focus for this exercise illustrating how a learning review could help with informed responses. Specific Actionable Recommendations (SARs) were sought from prior experiences so that these could be applied in similar future situations. Through this process it was found that some of this learning was transferable across other contexts as well.

A pattern for sorting the SARs emerged showing that organisations could use similar approaches to disaster management irrespective of the type of disaster or specific conditions. Learning points were taken and sorted according to strategic issues, resources, software or staff. In different contexts, it was discovered that there were common patterns and problems that were dealt with in all cases. The learning review also proved to be a therapeutic process which helped people deal not only with solutions but also with their feelings. This benefit increased staff's regard for the learning review process.

The learning process model helped the organisation learn about learning. It also prevented duplication of effort. After various learning reviews, Tearfund has decided to make learning an explicit part of the organisation's work. Learning and knowledge management have now become core to what they are doing. The organisation is able to overcome some of the weaknesses in its past approach, such as seeing knowledge as an add-on or not integrated into the workings of the organisation.

The organisation has discovered that learning with partner organisations enhances learning within the organisation. This has also fostered a desire within the partner organisations themselves to continue learning.

Discussion

Q: The lessons learnt in an oil refinery in Latin America would not apply automatically to refineries in Africa. What tools or common sense are you using to translate knowledge across contexts?

A: There are two ways of achieving this. Firstly, information is packaged as something that is recommended – the SARs approach. In doing this, we are not trying to establish policy but to present experience and then allow people to make up their own minds. Secondly, through bringing people in with expertise in the peer access route or the learning before phase, they can advise.

Q: What are the costs of setting up a system? You have to set time aside to undertake the kinds of learning processes that are being described. How do you address this?

A: Provided the first couple of examples illustrate success, people start seeing the value of investing time in meetings. The value added by investing time in the short-term leads to benefits and savings in the long term.

There is a fear in people's minds that you need to spend hours documenting everything that you've done. However, some of the techniques are very focussed and efficient and allow people to tap into joint experience.

Comment: Getting decisions right the first time is difficult. Actually you should be allowed some trial and error the first time and then get it right the second time.

Q: How could you hook your learning into other agencies' learning?

A: If we could start to identify what the sector knew about what happened in other contexts or countries around the same problem, this would help a great deal to provide access to a much wider wealth of experience.

Q: On the question of learning from events: in many organisations, the learning cycle is not always repetitive or in place.

A: Nothing ever repeats perfectly, but much of what we do has a beginning, middle and an end. Most businesses have cycles. The challenge is what is the trigger for learning. How do you get people to stop what they are doing so that they can learn. Reactive learning is only one type of learning. Proactive learning is something that can be grown through the learning review process allowing people to learn before they make a mistake.

All organisations have an array of knowledge issues. There are different types of knowledge issues. Some are of a much simpler order than others. Organisations generally have some issues at each end of the spectrum. Learning reviews seem to help organisations identify what not to do. The before, during and after process sums up what learning is about, but this is not the entirety of what knowledge management is about.

Q: The learning reviews have to be done in the field. How do you do these with partners and how can learning from one context be applied in another?

A: If a partner cannot be involved face to face, E-mail is used to engage people. Ideally, face-to-face meetings should occur. It is hoped that partners themselves will do these learning reviews.

Q: In the learning process model, if you don't form policy, how do you learn from events to develop policy frameworks and policy approaches which enable more effective action?

A: The difficulty with policy is that it is often only applicable to the context in which it is generated. If it were possible to generate policy that catered for all events, this would be ideal.

Comment: A characteristic of all organisations is this myth of uniqueness. A list of differences is often generated, but we find that there are many common denominators and many things are comparable.

If we take knowledge management and connect it with project management, a lot of common ground can be built between organisations.

Q: What about budgets and having these committed and/or cut?

A: Demonstrate value through measures or surveys and internal marketing because if you don't get the decision-makers on board with this, you will get your budgets cut.

Q: At the heart of knowledge management, how do you take the human asset and translate that into an organisational asset? Activists bring their own tacit knowledge and experiences to situations, but how does one draw this out to become organisational experiences; and how do you build capacities in these situations at the local level?

A: The value of knowledge management and learning goes up exponentially once you get to learning with your partners and once communities start learning for themselves. So hopefully partners can start teaching the 'lead organisations' something.

Q: How can knowledge management be used as an instrument to empower the South or developing countries? Why is it not possible to build South-South relations without coming via the North? It seems that many of the knowledge systems being developed build the North up as a necessary byway to stronger South-South linkages. Is this not another way of exercising control over the South?

A: Action Aid answers that they have done just this by sending teams from one South nation to another directly to exchange their information.

A: What seems to stop people learning from each other is that they don't think about doing it. They may not know who to speak to and they may not know how to contact them. Sharing knowledge is empowering.

Q: Can knowledge management be used as a tool of control?

A: The private sector organisations who have done this in a centralised fashion have stopped doing it. Centralisation has not worked because people will not partner and contribute to these types of databases which exist to assist in control. People on this track will experience deep disappointment.

Resources:

Nick Milton' Biography - see Appendix

Paul Whiffen's Biography – see Appendix

Hansen, M et. al. (1999) What's your strategy for managing knowledge? In: Harvard Business Review, March-April 1999.

Knowledge Resource Mapping

Overview knowledge mapping approach - Lyle Makosky

Denham Grey's definition of a knowledge map explains that:

The knowledge map portrays the sources, flows, constraints and sinks of knowledge within an organisation. It is a navigation aid to both explicit (codified) information and tacit knowledge, showing the importance and the relationships between knowledge stores and the dynamics.

Taking a knowledge inventory in your organisation involves having a sense of where knowledge exists. It is hard to inventory tacit knowledge because you are not always aware where this is located. The location and the nature of the knowledge are among the design considerations in developing a knowledge system.

There are different methodologies and technologies for knowledge mapping. Some of these are presented in the case studies that follow.

The following are some reasons for mapping organisational knowledge:

- To find key sources and constraints to knowledge creation and flows
- To encourage re-use and prevent re-invention by identifying known repetitive practice, saving search time and acquisition costs
- To highlight islands of expertise and suggest ways to build bridges to increase knowledge sharing
- To discover effective and emergent communities of practice where learning is happening. This could be a community of practice basis for a knowledge management strategy
- To provide a baseline for measuring progress with knowledge management projects
- To reduce the burden on experts by helping staff to find critical information quickly
- To improve client response or improve customer orientation, decision making and problem solving by providing access to applicable information
- To highlight opportunities for learning and leveraging knowledge by distinguishing the unique meaning of 'knowledge' within the organisation. This allows cultural issues to inform the development of a knowledge strategy
- To provide an inventory and evaluation of intangible knowledge assets
- To develop a knowledge architecture or a corporate memory

Meta-knowledge (knowledge about knowledge) is helpful in knowledge mapping. Organisations may want to map:

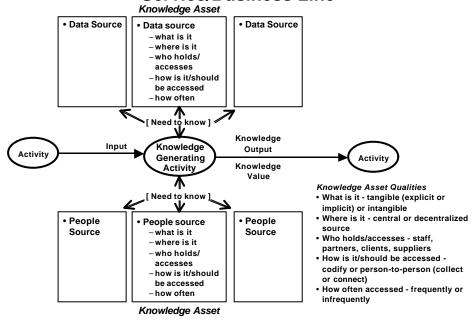
- Know-how: to create an inventory of what people know from practices and experiences
- Know-who: to identify where people are located and what their expertise is for purposes of linking and connecting
- Know-where: if knowledge located in various geographical locations is critical, this becomes an important indicator
- Know-why: getting at the rationale, drivers and objectives of the organisation and how these inform decision-making.

Makosky suggested that in mapping knowledge assets, organisations should:

- Identify the assets available to the organisation (internally and externally) which provide access to data and information, analysis, insight and advice, and which are needed to produce the knowledge that informs the key business processes
- Describe the qualities of these knowledge assets (what, where they are, who holds or accesses, how and how often they are accessed), so that a knowledge management strategy can be designed to link related assets and best utilise their qualities.

Using the diagram below, a key organisational process could be identified which involves a number of steps that have certain critical pieces of information or knowledge to take key decisions or actions. By mapping each of these steps, questions arise about what the need to know is; and where the required data, information and people are located.

Knowledge Asset Mapping - for a Key Service/Business Line



Starting with a key decision point, what needs to be known could be ascertained, what information is required and what people to hook up with could be identified. The asset points could be defined by different qualities to determine where the information is held. The nature of the information, whether tangible or intangible could be established and the means of accessing, whether codified knowledge or person-to-person knowledge, considered. Through this process, the assets required to make the processes work could be defined.

Development of a knowledge audit involves taking a helicopter view of an organisation and determining where the data and knowledge potential resides and what the flow of the energy is between these sources. It helps determine whether to map the people or the tangible knowledge, and how best to develop an audit based on the ways in which organisations want to use this information.

Case study 1 on knowledge resource mapping: using business lines/knowledge asset model - Chris Smart

Chris Smart has been with the International Development Research Centre (IDRC) since 1979. He is currently Director of the Special Initiatives Programme within IDRC's Corporate Services Branch. He addressed IDRC's use of knowledge mapping as part of the development of its knowledge strategy and programme.

Synopsis:

- Knowledge mapping provides an indication of where knowledge resides.
- Knowledge mapping identifies the kinds of knowledge in organisations and the processes through which this knowledge is communicated.
- Knowledge mapping processes indicate miscommunications or blockages in an organisation.
- Knowledge mapping should be an organisational activity involving as many staff as
 possible so that they become conscious of various aspects of knowledge flow and
 their own role in this dynamic.
- Knowledge mapping can help in identifying solutions to certain problems by indicating
 ways in which research areas can both be informed by real needs in the field, and
 influence policy directions and financial allocations.
- Knowledge maps are tools that are used in accordance with organisational values.
 The IDRC's emphasis on narrowing the digital divide informs its particular application of this tool.

IDRC seeks to build relations and meet the needs of people in the developing world. By way of background to the organisation, it has:

- 365 staff, under a third of whom are professional staff who deliver the programmes;
- a 1999-2000 budget of \$86 million Cdn for programmes and operating costs;
- in the region of 600-700 projects per year.

The IDRC has 7 offices spread globally which makes the knowledge management approach very much one of building equity and sharing between colleagues who work in the regional offices and those in headquarters in Ottawa. The IDRC's commitment to knowledge is evident in its mission statement: 'empowerment through knowledge'.

IDRC's programme is delivered through a cluster arrangement called programme initiatives that usually have a life-span of 3 years with the following characteristics:

- They are multi-disciplinary
- Have to balance regional and global contributions and activities
- Function as research networks

Are issue-oriented.

Immediate concerns for knowledge management:

- The IDRC has recognised that there is a problem and regards its knowledge management approach as a 'work in progress'.
- The gap between research and solutions is widening and closing the loop between the two has become difficult.
- There is great scepticism in the organisation about knowledge management which is seen as faddish and driven by the private sector. There is little understanding about why knowledge management is such a big issue.
- The IDRC is very much a 'do it yourself' organisation and wants to address internally the question of what to do about knowledge management before drawing in external consultants to advise them on how to do it. This hands-on approach should also ensure that knowledge workers develop through a process of reflection and working with the problem, extending the organisation's own resources and efforts. The IDRC's IT base, information management tools and systems, ought to support this process.
- The organisation is facing a key decision that will be made at the end of this process of working through the knowledge management issue: is this the time for a Chief Knowledge Officer?
- IDRC staff are keen to engage in scenario planning, which allow them to understand where IDRC is at present as opposed to where it would like to be. The various scenarios sketched should address questions of what it will cost to make changes. The organisation is daunted by the cost involved in knowledge management strategies.
- A fundamental question for the IDRC has been to address what the centre's knowledge responsibilities are and what its knowledge objectives are. The organisation could simply maintain a good library and publish as it's done in the past. However, in taking a knowledge management route, this responsibility changes and it never seems to end. The IDRC has realised that when the organisation says it doesn't have the resources to address knowledge requirements, it loses tremendous credibility, respect and ground.
- Also, the question of where the organisation fits into the world of knowledge generators and knowledge users raises the difficulty that once it declares itself, it is ranked according to others in the field and IDRC fears that this could be deflating.

The IDRC Knowledge Map

In an attempt to develop its knowledge strategy, the IDRC has developed a knowledge map that depicts an honest account of where the organisation is at present. To map knowledge in the organisation, various players including professional and support staff along with human resource, finance and information personnel, were assembled and asked to help define the organisation's 'need to know' issues. The IDRC's knowledge generating work falls into two categories:

- 1) Knowledge activities that make a wise allocation of resources. Misreading the 'need to know' and the use of the knowledge assets in this phase leads to bad choices.
- 2) Research results to inform management activities and aim for a close relationship between the developing country needs and professionals who develop research proposals. It is important for the IDRC to ensure good feedback to decision-makers about where monies should be allocated for further research and programme work.

Through this mapping process it has become clear that the link between the activities of the organisation and the policy making space is flawed. Whatever is done in the internal sphere of knowledge management should help generate policies that enable the organisation's external work to be undertaken.

What the knowledge map has shown:

- In drafting its knowledge map, the organisation has discovered that it is dealing with a significant volume of tacit knowledge. It has found that over a third (about 36%) of all the knowledge assets that they have identified only exist because of the persons who have the knowledge. The knowledge of senior managers is an asset as is that of programme managers.
- One of the arguments being made by the IDRC is that the organisation has to find meaningful incentives and rewards for people b be knowledge managers. The performance of and investment in individuals is crucial to the organisation. It is important to find effective rewards that encourage good performance. Investment in staff seems to be pivotal to effective knowledge management strategies.
- The map has revealed duplication of certain knowledge assets, as well as isolated, documentary and functional knowledge assets. Each of these raises questions for the organisation to deal with including effective mapping, technological requirements, etc.
- A particular concern for IDRC is that whatever decisions are made will affect researchers and workers in developing countries. If the Centre makes certain decisions, it has to know whether it is going to contribute to the digital divide or narrow it. IDRC is conscious of the fact that clients in the developing world are sometimes working in conditions that don't allow them to meet funders' requirements easily, e.g. the need to produce six copies of reports when you're using carbon copy. The organisation is making a concerted effort to bear these discrepancies in mind. It is in this light that a question the IDRC asks of itself is how best to address the knowledge management issue constructively.

Next moves

The IDRC is currently working towards a knowledge management strategy. Communities of practice have emerged in the organisation, but staff have expressed concern that knowledge management cannot be an add-on.

Discussion:

The discussion of this presentation was combined with that of the following presentation and will be found under Peter Kibby's input on CIFOR.

Resources:

Chris Smart's Biography – see Appendix

Case study 2 on knowledge resource mapping: using an external consultant - Peter Kibby

"Knowledge mapping is not an exact science ... every map is drawn to a particular purpose" – Peter Kibby

Peter Kibby, a Senior Information and Knowledge Management Consultant for TFPL, asked the audience how many people don't use the words "knowledge management" and discovered that many people prefer knowledge sharing. Kibby represented The Centre for International Forestry Research (CIFOR), which was formed about eight years ago in response to environmental concerns. His presentation outlined the use of an external consultant to promote knowledge asset mapping.

Synopsis:

- In addition to identifying knowledge assets, knowledge mapping is an important means of seeing and understanding organisational flows, procedures and relationships.
- Maps are constructed diagrammatically, in tabular fashion, or simply visually in accordance with the particular needs of an audience.
- Dysfunctional lines become apparent and improved methods of interaction that enhance performance can be developed.
- In CIFOR's case, the need to build communities of practice to bridge gaps and unnecessary divides became clear through knowledge mapping.
- Systems that put people in touch with groups of people is an important aspect of knowledge mapping.
- Establishing whether organisations seek to develop information or knowledge bases is important in identifying appropriate knowledge strategies.

With a staff of about 120, CIFOR have a philosophy of being an organisation without walls. They leverage a small base by using expertise from around the world. Structurally, they are a flexible, flat organisation sharing strong links with relevant global forums. Their work occurs in a multi-disciplinary, multi-cultural environment.

The knowledge mapping project aimed to:

- Build consensus to overcome the tensions which often cripple organisations
- Identify and overcome barriers that stop CIFOR from achieving what they ought to be doing to save costs
- Set some initial measures for subsequent comparison
- Agree on some recommended action.

Strategies for project development

In developing a knowledge management strategy, the two organisations, TFPL and CIFOR, spent a long time via E-mail contact identifying what they should be doing

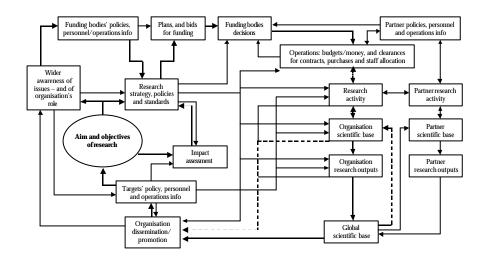
together to save costs. A week-long, on-site, dynamic visit took place and was designed to engage staff. During this week, the team explored how CIFOR could benefit from explicitly sharing knowledge. To get the discussion going a launch seminar was held in a facilitated environment to find out exactly what CIFOR wanted to achieve through the partnership with TFPL. In addition, about 27 people were interviewed and a questionnaire circulated to validate the seminar discussion findings.

The week produced enough information and thinking to develop a strategy for the next few months. The project needed to take account of how to leverage knowledge with people who were not part of the paid team. It was also found that various people who were part of the team were leaving with their tacit knowledge and becoming alumni. The meeting recognised that there are silos in every organisation and wanted to establish how to work with, and ideally across, these.

The team felt that it needed to be able to work with CIFOR's IT infrastructure, its content and its people. This required a great degree of co-ordination covering the following areas:

- Processes and systems
- Information and knowledge content
- People and culture; and, most importantly,
- Vision; It was agreed that people have to be lead and not managed in this kind of transformation process. Values have to replace control and a safe environment has to be created in which people can feel secure about not knowing certain things.

In considering the use of a knowledge map, Kibby proposed that a map can be considered in two ways: either in tabulated form providing information arranged according to certain categories, or diagrammatically illustrating relationships or missing links between various organisational units.



CIFOR knowledge flows

The dotted lines in the map indicate dysfunctional knowledge flows illustrating for instance that communication between scientists and people who should be using their information was not good.

The map shows people their role in relation to others. Knowing your position in the organisation is an important starting point for people to see the larger picture. Maps can help in finding drivers, dysfunctions, etc. The map also shows that the organisation is a knowledge ecosystem. Where you have problems, it affects the entire system.

Creating CIFOR's knowledge strategy

To create a strategy the team was looking for recommendations that could help CIFOR function and use information more effectively.

- They had to start tagging procedures from a business, rather than a subject perspective, to make them more retrievable. In this way, articulation could be built between different disciplines that use different terms for the same concept.
- It seemed that scientists were largely talking to others within their own disciplines rather than to people across disciplines (a goal of CIFOR's). It became clear that know-what and the know-who are very different issues, and there are usually more important people located outside of the organisation than within and these are the people CIFOR needs to contact to maximise its resource base of expertise. Based on this organisational need, the team emphasised the 'who people know' approach to developing yellow pages. The knowledge that is transferred between individuals is less powerful than a system that puts you in touch with many people who have know-how.
- The team realised that its purpose was rot to capture existing knowledge for the public domain. Rather it was about creating new knowledge through new relationships and interactions. A clear difference exists between a knowledge management approach that tries to capture knowledge and in the process creates information (or databases), and one that tries to create knowledge by using information. For the latter purpose, communities are a key element.
- The team discovered that no matter how improved the information systems are, it is absolutely crucial that people are information literate and that they can use information systems efficiently and effectively.
- The CIFOR picture showed that the scientists were not dealing sufficiently with communications people, who work to get the outcomes of the scientists' research and knowledge into the hands of people who could benefit from the information. This proved just as important as getting their outputs to other scientists.
- It became evident that the best reward for knowledge management was recognition from senior management. Many people want to be recognised for what they do.

Conclusions

By way of conclusion, CIFOR has found that its research environment is paramount to achieving its organisational goals. The team discovered that:

■ The organisation is creating knowledge rather than just information;

- Its methods of working rely more on person-to-person approaches rather than codification approaches;
- The organisation seeks to facilitate knowledge sharing and communities of practice.
- Scientists perceive knowledge management as an information issue rather than as an organisational issue.
- Impact assessments are important but in the meantime, the maps are showing other important things for the organisation, such as which information sources are being used and which networks add value.
- The intention at CIFOR is to have developmental outputs from the scientific inputs.

Kibby concluded that knowledge mapping is not an exact science and that TFPL is learning from experience. Their work is responsive and they are finding that every map is drawn to a particular purpose. The visual map forces a coherent view and enables understanding so that people can see things clearly and differently.

Discussion

Comment: On Budget: You cannot simply translate the expenditure of one organisation to another when it comes to knowledge management. The question that should be asked is whether it makes sense for the staff of an organisation to share what they've learnt. If they don't spend any time doing this, then development organisations are going to have problems. Allocations then are not about absolute figures, but about proportions and priorities and how these are costed realistically within the budget of an organisation.

Comment: Most budgets are drafted on an A (grants for projects) and B (overhead) approach. IDRC have just had their board approve an ABC budget. The A category is committed to projects; B covers infrastuctural and overhead costs; and C is the cost of knowledge intensive activity. Part of the challenge is to explain that spending money on knowledge management will make for better work across the organisation as a whole, impacting positively on all aspects of work.

Q: How do yellow pages that depict who-knows-who look?

A: They have records of everybody and who everybody knows. Data protection is a problem area. You have to have permission (personal and organisational) in order to hold their records. The alternative may be recording this for your own organisation.

Q: Meta-data and tagging include profiling. Will this not make people very insecure in terms of sharing their own information because it is quite exposing? Would people not resist this?

A: Free choice of contributors in developing these yellow pages is essential so that you overcome the ethical problems. If you make it voluntary, you could build in a way of updating out of date records, as their records will reflect their value.

Website statistics are meaningless. You need to have an integrated user directory so that you can start recording who uses what and for what. For example, Hewlett Packard monitors who uses their information systems and why information is being used, so that they can invest more intelligently in developing these services.

Q: What is the integrity of the knowledge that big organisations like PWC use and what could their impact on poverty be based on the knowledge to which they have access? Are we looking at the ideas industry and ideas business to see how they are working with knowledge?

A: It is not clear what value these global companies are drawing from their knowledge strategies, but there is no doubt that in the area of knowledge sharing they are using knowledge sharing strategies within their organisation to do their business better. In the global public goods debate, there are growing questions about proprietary and non-proprietary knowledge. The issue of knowledge is coming to the fore increasingly. When we reach the stage where development is seen as not being about money, but about knowledge, we can turn to using knowledge for people rather than for profit.

Q: Do you organise communities of practice around business departments or around certain issues?

A: Different places dictate different needs. Where the need is to spread across disciplines and existing divisions, it is important to embrace this challenge. There are some simple rules about how communities have been made to work: you have to identify a problem and a leader, create rules and a boundary over which people have to pass, have a common task, and the use of outputs to pass the message along the line. The most important issue seems to be to determine how best to extract the value that communities of practice generate.

Resources:

Peter Kibby's Biography - see Appendix

Victoria Ward (n.d.) Knowledge Management: a cartographic approach.

Hildebrand, Carol (1998) Mapping the Invisible Workplace. In: CIO Enterprise Magazine, July 15, 1998.

Accessing Knowledge

Overview of two core enablers of knowledge access - Lyle Makosky

Codification approaches, communities of practice, and certain enablers of these strategies are then considered. The workshop dealt with technology and facilitation as enablers. These are not the only enablers but they are certainly two of the more significant ones.

On the basis of knowledge mapping and auditing activities the question of how best to acquire the knowledge around which strategy is being developed becomes pertinent. Organisations have to find the most suitable collection or codification approaches that allow them to achieve reliable retrieval of the information they chose to map. Alongside this, the most ideal person-to-person or communities of practice strategies have to be considered. In most cases, organisations will use a combination of approaches. The enablers (whether process or technological) which allow these strategies to take shape and form will have to be considered to determine how best to do the necessary jobs.

Various methods of helping organisations think about their enabler requirements were presented, including the grid below. This diagram helps in thinking through the different kinds of technologies organisations would use for different purposes.

Collaborative Group Technology Options

TIME

	SAME	DIFFERENT
	Real time decision support	War Room
SAME	• Town Hall	Living Wall
PLACE	electronic poll	Logistics planning and managing
DIFFERENT	InterNet based electronic forum (set time to	InterNet based electronic forum (can contribute at
	• Videoconferencing	any time)

The 'Time and Place' matrix shows the different types of collaborative group technology options that could be useful in various knowledge management strategies.

⁷ The following caution was stated at the outset: Knowledge management ought not to be conflated with information technology. Knowledge management is not about technology chasing a solution and technology ought not to be seen as a driver. Processes of transformation must be steered by organisational strategy and purpose and technology used as a tool to achieve set objectives.

Overview of range of possible technologies - Peter Kibby

"The only irreplaceable capital an organisation possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who can use it" – Andrew Carnegie

In quoting Andrew Carnegie, Peter Kibby suggested that while this quotation is a hundred years old, the new ingredient that changes the nature of organisation is the flexibility of technology that allows its application where it is required. Networks are a new dimension to technology, serving as platforms that support communication.

Synopsis:

- Technology has to be applied to the purposes required of it by organisations, although there are instances where technology can drive processes of change.
- The convergence of telecommunications, microelectronics and computers heralds an era of enhanced communication within and beyond organisations.
- The changing nature of organisations flatter structures, improved communications results in greater individual choice about who to communicate with and how.
- Technological applications vary and are wide-ranging, from common applications such as e-mail to less common applications such as video-conferencing and the use of IT to generate metrics.
- Policies and standards that enable appropriate use and application of technology should be developed in accordance with business ethics and values.

In addition to the convergence of telecommunications and information technology, the second aspect of technology of significance is **price**: technology is one of the few sectors in which price decreases despite its value. This is due to the rate of innovation in the sector. A third issue is **increased demand** meaning that suppliers are delivering to a growing market and have concentrated on de-bugging their technology. Because technology is more robust, the real focus of connectivity and networking becomes content, which is expensive.

The changing nature of organisations - towards knowledge economies

Alongside these developments, management concern with ethics is becoming more prevalent with flatter organisations which connect peers and require more, rather than less, communication. Knowledge economies emphasise individuals and their contributions to organisations. This differs from industrial economies that downplayed individuals and celebrated organisational strength and power. Also, in a network economy, individuals can identify who they need to talk to. This transparency creates competition for preferred partners. There is a change in values favouring leadership instead of control, and to innovation rather than permission-seeking. By changing the environment in which people work, it is possible to change the way in which people behave.

Kibby talked about the information-knowledge distinction by exploring the relationship between tacit and explicit knowledge and how these differ in generating information on the one hand and knowledge on the other. Tacit knowledge, when recorded, becomes

information. Recorded information that is used in interactions generates knowledge⁸. Making documentation more accessible (the explicit to tacit cycle) requires a different process to that of recording experience. This can be achieved through the creative use of space by connecting people for purposes of generating knowledge. The conference design used in this workshop, which grouped people for interaction and exchange, was a good example of this. On the contrary, business places which dvide workspaces according to functions result in environments where people don't talk to each other across these divides. This can stunt the potential for knowledge flow and creation.

Technological applications

In listing the range of **common** technological applications, Kibby talked about:

- repositories (e.g. asset registers, personal profiles, directories) which utilise templates, tagging and database management technologies;
- virtual communities (e.g. communities of practice) which utilise E-mail and video/telephone conferencing; and,
- intelligence services (e.g. good intranets). External content on intranets and good intelligence services that gather news and broadcasts it back to user communities, can encourage their use.

Specialist IT applications include:

- suggestion schemes / innovation development; software which allows people to make contributions with varying degrees of anonymity;
- shared objects in virtual communities; such as through video conferencing in which distant communities have access to conference discussions and presentations remotely; and,
- decision-support tools and systems that can also aid communication.

In terms of the **less common** applications, he proposed using IT for:

- generating metrics and benchmarking; and,
- monitoring the use of IT and noting correct and incorrect uses. Search engines can usefully generate these metrics, e.g. name misspellings can be automatically corrected.

Approaches to developing knowledge systems

Kibby proposed simple policies and standards for information use. For instance, there should be simple rules governing the use of E-mail ensuring that it is used wisely and not overused.

In relation to the development of systems, he suggested use of the onion model (hardware, software, applications, information, management) which stresses that a computer system should only be purchased once the software to be used has been

⁸ For a discussion on the differences and the relationship between information and knowledge, refer to the Appendix on "Distinguishing information and knowledge".

determined. The software should only be bought once the information to be put through it has been considered. Information should be generated only when it has been decided what it will be used for and this should only be established on the basis of an organisation's core business. In this building blocks approach, Kibby suggested that consideration be given to management, strategic development, the designers and suppliers of information, design processes and the development of appropriate policies.

The management of information can be divided into:

- Meta-data: data about data to make it manageable, e.g. addresses;
- Taxonomy: organisation of information, e.g. classification schemes, thesauri; and,
- Text analysis: technology that can generate summaries and automatic tagging.

Technologies that can be used to help arrange information include: Indexing and classification technologies, spidering, profiling, modelling, workflow tools and statistics gathering. Underneath all of this, a network and browser platform is necessary to connect with other organisations. Simplicity is key to ensure that organisational systems are able to function on the basis of the lowest common technological denominator (cf. Song presentation, Theme 2).

Conclusion

When looking at knowledge management technology, Kibby stated that organisations rarely need to consider new software packages. Effective use of the existing software should be the focus: "it's not what you've got, it's what you do with it". He urged the audience to place the technology in a broader perspective by considering the application of technology to what organisations want in their businesses. Business objectives should drive organisational change and the use of technology.

Discussion

Q: In database development there are concerns about piracy, overselling and underselling. Do you have any advice about how to make projects successful?

A: Nowadays it is possible to make data visible to people who need it. If you can see the data and change it, you should be able to overcome the data protection and privacy rules. In developing a database you need to find out what people need to know, what they already know and who they know. The best way of doing a knowledge audit is via an expertise database which allows people to create their own records which are edited by their peers.

Q: How much progress has there been with developing software which does not have to search full text but can retrieve documents on the basis of enquiry.

A: A range of software, such as *Autonomy* (which can search volumes of documents) can find keywords and create tree structures, but human structured content is better than machine constructed content when it comes to indexing.

⁹ For a better understanding of 'spidering' refer to the Armstrong presentation following in Theme 2.

Resources:

Peter Kibby's biography: see Appendix

Meek Tim (1999) The Evolution of Information Technology at Buckman Laboratories. In: Knowledge Management Review, November/December 1999 (www.km-review.com)

Case study on developing a technological OneWorld.net support strategy in a development organisation - Peter Armstrong

Peter Armstrong, Director of OneWorld.net, addressed the use of search engines to facilitate knowledge sharing, using OneWorld as an example. He explained that OneWorld started as a search engine, quickly turned into a portal, and then into a 'honey track' because it leads people to the information they require.

Synopsis:

- Searching is a complex business made more difficult by the rapid increase in the size
 of the Web.
- The competitive business of search engines to produce results speedily generates responses to queries that are sometimes unhelpful.
- OneWorld has a niche portal in the area of 'sustainable development' and in 'human rights information'.
- Pressures to expand scope and improve delivery present a challenge to OneWorld growth while retaining quality service.
- Global levels of standardisation in indexing, coding and tagging offer opportunities for networking initiatives and improving retrieval capabilities of search engines.

How reliable is a Web-based search?

The most popular way of finding information on the Web pages is via hypertext links. Search engines are second, while recommendations from friends and print references follow in terms of popularity. About 18% of people (based on a sample of 40,000 taken at the end of 1999) find what they want all of the time, versus 50% who are only satisfied "most of the time".

The Web now comprises over a billion pages so that it has become hard to index. The largest search engine, Altavista, searches about a third of the Web, while Northern Light and Google search around a quarter. For any single search engine, a search probably misses at least two-thirds of Web content that is not covered or indexed. With an overlap between search engines, about 47% can be covered in a multi-engine search, which means that at least half the Web is missed in any comprehensive search.

How often do search engines update their view of a particular page?

It would take one search engine about ten months to systematically index the entire Web. Despite innovations in indexing and classification techniques, spidering and indexing are not instantaneous processes by any means.

In dealing with the response to a Web search, it appears that most people don't go beyond the first hundred results. The fact that there may be a million results to a query is irrelevant when people often don't interrogate results beyond the first 10 or 20 hits offered by a search engine. Unfortunately, not even these results are reliable. In fact, the

¹⁰ Spiders are programs that can be set to automatically search remote servers to harvest and display information.

relevance of retrieval is dubious: e.g. a search on the term 'debt' yields mortgage loan and banking type information with some highly irrelevant links to world debt issues. Many sites contain dead links, generally about 5-10% of all results.

The use of multiple terms (not using Boolean logic but a string of terms) is declining and the use of single key words is increasing, as is the use of predefined options presented to users. When using 'international debt' to search, results are still unsatisfactory, returning credit and debt collection agency information.

How do search engines prioritise results within the first 100 hits?

In the past, it was possible to purchase the highest place on the list. This has since been exposed and is no longer in use. Lycos uses the most **popular** sites based on sites people used from previous lists to determine which sites go up in their ranking. Some search engines adopt an approach that prioritises sites on the basis of the most **frequent use of the terms** being searched. However, this leaves the search engines open to "spam", where sites load up on popular words to increase their chances of recall. Google has a very complex algorithm based on **citations**. A page that is most cited from other sites, which are themselves highly ranked, goes up on the list. This leads to the retrieval of much more authoritative material.

Against this backdrop, how does OneWorld make itself different?

OneWorld has developed a niche portal for sustainable development and human rights. It only searches, spiders, summarises and indexes the 750 partner sites which are part of OneWorld and agree to have their sites searched. This adds up to about 1.5 million pages at present. Due to this approach, all entries are from a known provenance. Sites are all summarised (using *Verity*, software originally developed by the CIA) producing a paragraph based on an entire document. The size, URL and date of modification are also provided. Sites are spidered at least weekly, improving reliability of the information provided.

In addition to the paragraphs and summaries of information provided, OneWorld produces guides to thematic areas with links to content, organisations and campaigns all from the same database but repackaged for different audiences. They also produce a "know-who" directory and provide information on partners involved in the field being searched.

Spiders visit different sites at regular intervals to update information. They operate in multiple languages and can do more complex searches that slow down the process. There are various decisions to be made about how much detail the spiders should be looking for. This can only be done through contact with an organisation's Webmaster, who can advise on how to access information 'through the backdoor'. The software can glean the following information from a page: the language, date of update, and keywords. Concepts can also be searched for. This means that for each key term, there is a complex definition provided with broader, narrower and related terms defined which are weighted in association with the terms searched for. This process generates a better match during the search. For example, 'agriculture' would be linked to 'farming' so that should either term be searched for, only documents containing both would be retrieved.

Problem areas for OneWorld

 There is huge growth in the number of pages being indexed. As a small organisation, up to half a million documents were manageable. After this, the process has become quite slow.

- 2) People are expecting quick results and OneWorld is lucky to provide a 15-second response because of the complexity of doing a real time search on terms. There are questions about whether going into partnership with commercial organisations might be more efficient.
- 3) There are real limits to the kinds of analysis that can be done on pages because the data is largely unstructured. Organisations could be given tools or rules to develop their databases and structure their Web pages. From unstructured documents, it is difficult to find information required or to generate reasonable summaries.
- 4) More and more sites are either database-driven or are themselves databases. This presents a problem for spiders which are unable to access databases.

Armstrong concluded that these conditions call for the use of metadata and standards like XML, to structure databases so that they can be harvested, summarised and accessed by aggregators. The more aggregation that goes on at all levels of civil society, the better, as information resources should not be concentrated in any one set of hands. OneWorld has an interim solution to cross-search databases, which allows for results to be presented, screen by screen, for all partner databases.

Discussion

Q: What is the shift to XML and what does it mean to OneWorld?

A: The IDML (International Development Mark-up Language) initiative is an effort within the international community to use eXtensible Mark-up Language (XML) to create a standard to share information on development projects. At this point it's just about project information, but it will hopefully also include evaluation and bibliographic information. XML is similar to HTML in terms of identifying content. If used with different documents on different servers, it can locate and aggregate disparate information. It won't replace HTML, but allows communities to share their information. There are now XML-based mark-up languages for chemistry, mathematics and classified ads.

XML would challenge the World Bank's Gateway idea, which centralises information by one agency. It would help organisations to organise their information in a way that allows for it to be local, yet aggregated (by language, subject, geography, membership of a group, etc.), collected and organised, so that it is more accessible. However, people are not keen to add standards if it is more work for no benefit and therefore the XML initiative must either provide free tools to organisations to encourage them to encode their documents using XML, or people must be persuaded of advantage.

Q: To what extent is OneWorld developing capacity within developing countries?

A: About 25% to one third of our partners are in developing countries and we are increasingly emphasising these partnerships. The question of language, literacy and infrastructure are major barriers. With a growing Chinese audience, how are we going to hear? With automatic translation (although still unrefined) there is a problem with how these people are brought into this broader discussion.

Q: You've described OneWorld as having difficulty because of its growth. What direction is OneWorld taking?

A: We are having conversations with Sun about collaborating and building on their technology. We have funding from DFID to rebuild our own system. We need more people

to deal with the volume of work. Short term, we're improving what we're doing, but long term we're having to consider linking up with the major players.

We're also forming strategic alliances, such as with DFID, but when you have 750 partners (and growing) it becomes quite difficult to monitor the spin-offs of all of these relationships.

Resources:

Peter Armstrong's biography: see Appendix

Case study on future knowledge management technology directions at CIDA -Adrian Poplawski and Micheline Chartrand

"Knowledge is basically how we make sense out of things" - Adrian Poplawski

Adrian Poplawski acts as the interface between the business of the Canadian International Development Agency (CIDA) and it's technology wing. He promotes CIDA's practical and inclusive view of knowledge and its commitment to transform the ways in which they are working with their partners to produce a better product.

Synopsis:

- Technological change invariably introduces a climate of constant transformation.
- Knowledge related initiatives generate further knowledge activities within organisations.
- The use of intranets and extranets facilitates communication across a dispersed organisation on a daily basis.
- Different forums allow for directed communications without constraining information flow within organisations.
- Policy approaches to knowledge strategy development have to link with what is happening on the ground and with pressing organisational concerns in order to be appropriate and relevant.
- Policy and technology have to inter-relate so that both enable progress and improved service.

In sharing knowledge, CIDA is focusing on the dissemination of information, results and lessons learnt. Knowledge is created through bringing together partners and shareholders in the organisation around issues and practices to produce new ideas, perspectives and insights. In the application of knowledge CIDA has requested that partners and shareholders collaborate online on specific projects.

The CIDA Approach

CIDA has focused on building its own IT knowledge management infrastructure, having just implemented four modules of SAP (http://www.sap.com/). The Agency uses collaboration software and various portals to share information within the organisation. The main intranet site acts as a portal used to communicate the basics of day-to-day operations.

As part of the Canadian government, CIDA needs to make all information and services available to citizens electronically through a project called Government Online. The outreach component of Government Online means having to make information available to those outside of Canada as well. This includes information on immigration services, goods and trade, development assistance, etc.

CIDA uses an extranet which is a culmination of the various intranets and the Internet. Access is controlled to promote free flowing discussion and information sharing.

Extranets as communities of practice

CIDA uses its extranets to promote knowledge sharing in the following ways:

- Through its **Partners** Forum, CIDA is exchanging information with partners (including organisations working on a contractual basis, both the not-for-profit and the profit sectors, and universities) and producing information for sharing. There was tremendous interest in this forum. Partners indicated an interest not only in sharing with CIDA but also with each other.
- The **Field Representatives** Forum provides an opportunity for exchange between staff with solutions that may be pertinent to others. Various types of information is provided (e.g. contract regulation), encouraging interaction between head office and those in the field.
- The **Strategic Information Management** Forum (SIMP) tries to share experiences across different programmes and encourages a solutions approach.
- The **Regional** Forum allows branches to share among themselves.

In CIDA's practice, Extranets are designed to promote a dynamic and virtuous cycle of knowledge. The first step is to disseminate information that can be used as formal or explicit knowledge. The second step is to encourage members of each Extranet to develop new knowledge through online discussions. The third step entails the implementation of this new knowledge in the design, development and management of specific projects. The goal is to harvest the results of this implementation effort and to disseminate those as formal/explicit knowledge through the Agency's intranet.

The Policy Approach

Micheline Chartrand explained that CIDA wants to become a knowledge-based, learning organisation. As of October 1999, a team of two people was located within policy branch working on the Knowledge Management Initiative. They relate to the knowledge management component within the Information Management and Technology branch of the organisation, which provides the tools and mechanisms for knowledge management to become a reality. The policy division relies on a technological platform to implement the various components of their Knowledge Management Initiative.

The Knowledge Management Initiative is doing a survey of networks that exist within the organisation. The intuitive approach was to work on a person-to-person basis. Soon after the Washington workshop, a proposal was developed to promote support for networks (communities of practice). Within CIDA, there are about 30 of these thematic groups involving about 1200 people. The proposal was not accepted by the Executive Committee and was not included in a broader strategy of knowledge management. A Knowledge Management Forum was organised in May – involving about 150 people from various departments and from partner organisations. There has now been a turnaround in viewing networks as a possible knowledge-sharing platform. A knowledge strategy now underway is still very much a work in progress. One of the components of this strategy is to provide support to some of the networks. Another component is the development of expert directories to promote interaction both within and outside the organisation. The extranets and the intranets are seen as crucial means of communication with CIDA's staff and partners.

Future directions

In the future, CIDA will be involved in profiling and metadata to map and identify appropriate forms of access to knowledge and expertise within the agency. An example of the way in which knowledge is being applied is Online Project Management, which develops tools to support knowledge management within the organisation. CIDA is also extending knowledge skills to partners and encouraging interaction among them through its SIMP initiative.

Discussion

Q: In terms of preparing a knowledge strategy, what are the implementation plans and budget?

A: The Agency is finding that it has to invest more in both hardware and software to support new developments within the organisation. The policy development side generates its own budgetary requirements.

Q: With regard to the dissemination of ideas, knowledge and lessons, how do we ensure that the lessons are internalised, adopted and utilised by users?

A: We've had our lessons collected over time — about 4000 lessons of best practice - become so homogenised that they've become irrelevant, so we've had to go back to basics to find out what people are talking about in their evaluations. What has become clear is that lessons have to be relevant to be used.

Q: What about making connections between networks and building more of a fit between organisations?

A: We'd like to establish contact with other donors to share information because we are generating lots of experience and know that other agencies have lessons that we would like to take advantage of. We're still unclear as to how best to do this.

Q: What are some of the issues that were contained in your knowledge management proposal that were not approved?

A: Management was not that convinced that the networks were that relevant. The networks sought to be legitimate, and wanted the organisation's agenda to remain member driven. CIDA is trying to maintain balance to ensure that the networks, while being untidy, actually get somewhere and are accountable to the organisation.

Q: There is a lot of emphasis on communications and networking, but we've also discussed lessons learnt and the collation of good practise. Much of the literature which has knowledge as a competitive tool looks at how you create new knowledge and new learning. How do you draw out the tacit, embedded knowledge which is difficult to codify without it becoming out of date. Beyond saying that we believe in communities, how do you generate and share new learning and new knowledge?

A: This may be a cultural shift, but it is also a structural issue because organisations have to deal with how easily (or not) information flows internally. The organisation of CIDA is so big and hierarchical that learning is not easy. A study undertaken has shown that CIDA is spending about 100 million dollars on repeating and reinventing knowledge the

organisation already had. We have a tremendous amount of knowledge which we are not tapping into and even once we've built the systems to codify this knowledge, we still face the challenge of getting people to use it. CIDA found that it was spending too much money on repeating research and regenerating knowledge.

Q: About linking networks, what would be the role and purpose?

A: When we set up our Field Representatives Forum, we wanted to provide information that people needed on the site and found that doing this in the simplest way was most effective.

Resources:

Adrian Poplawski's biography: see Appendix

Micheline Chartrand's biography: see Appendix

Knowledge collection/codification approaches

Case study: DFID - Adrian Blundell

Adrian Blundell, Head of Information Systems Strategy and Development in the UK Department for International Development (DFID), spoke to the use of Performance Reporting Information System for Management (PRISM) as a codification strategy to facilitate effective use and re-use of information and knowledge within an organisation.

Synopsis:

- Information system strategies should be seen as part of overall organisational knowledge management strategy.
- Codification presents issues of capturing information systematically as well as categorising and tagging qualitative information such as lessons learnt.
- Intranets require standards for effective use as communication systems.
- The gap between information or knowledge systems and their application and effective use has to be closed by people in their daily work.

Blundell explained that while DFID does not have an explicit knowledge management strategy, it does have an evolutionary approach to information systems that includes the PRISM initiative. The organisation has over 2000 staff in two primary locations in the United Kingdom. It also has 10 main overseas offices and 45 smaller offices. Information players in the organisation include the Information Department and Library, the Evaluation Department, Information Systems Department, Knowledge Policy Unit, and Statistics Department, as well as information units that reside within professional groups such as the organisation's Social Development Unit. One of the challenges is to bring these groups together and develop a focus for taking forward a knowledge management strategy.

DFID has developed architectural standards with a common software and hardware base throughout the organisation. E-mail has been used for about ten years with many communities of practice using this medium of communication. Virtual private networks have allowed for extension of an intranet to overseas countries.

PRISM succeeded the organisation's Management Information System (MIS), which had been developed during the 1990s to capture basic project data for management analysis. Information "disappeared" in this system and it was never effectively used in the organisation. Senior management became interested in performance reporting and lessons learnt, and believed that PRISM could provide this service across the entire organisation.

PRISM's main objectives are to:

- Develop a consistent and reliable project information system to allow aggregate reporting and analysis, replacing the many small systems springing up which yield conflicting results;
- Capture performance information such as purpose ratings and lessons learnt;
- Capture report and analyse pipeline information that help direct future strategy; and,
- Provide links to electronic project documents.

Through PRISM, the organisation became involved in codification, leading to the capturing of project information such as financial data, approval levels, purpose statements, and various codes (e.g. economic sector codes, and policy information markers which describe various activities, etc.).

The approach taken to PRISM very much involves data marking so that reports are far more precise, addressing the needs of different audiences. While the reports may not be too exciting, they provide information on what the organisation is doing.

DFID is presently capturing performance information that trigger interesting debates about how these measures are used. Some of the questions relate to whether those departments that are performing well will take fewer risks to retain their high levels of performance, possibly becoming less innovative. Despite these concerns, this development has improved accountability. The organisation has tried to capture ratings of projects and the justifications for these ratings. They've captured lessons learnt, but are having to deal with information overload and synthesis of the lessons emerging to allow staff to digest and use the information.

Intranet development

DFID's rationale behind establishing an intranet in 1998 was to lend some structure to unstructured document sharing across the organisation. On the basis of an audit, a second generation intranet is being established with more centralised maintenance, greater quality assurance, use of standard metadata practices, and organisation based on information types and themes. The introduction of standard keywords is seen as the foundation upon which to build a knowledge management strategy.

Lessons to date

- There has been some organisational resistance to performance scoring despite the support of senior management.
- PRISM is not a knowledge management system, but an information system and cannot provide the solution to knowledge management requirements.
- DFID has recognised that little attention has been paid to people and cultural issues.

Despite these difficulties and the absence of a change management approach to accompany the development of PRISM, what has been achieved is a corporate resource that people have bought into and which provides information on what the organisation is doing. In this regard, PRISM lays the basis for further, effective knowledge management development.

DFID's next moves

DFID is looking at the development of a knowledge management strategy with information management competencies forming a part of this focus. There is an effort to develop correct use of E-mail, and a Web-based version of PRISM. Outputs from PRISM that support particular country initiatives are being produced to ensure that the resource developed performs in accordance to the needs of the organisation.

Discussion:

Comment: SAP and PRISM are systems used to organise data and records. The real potential of XML is to offer organisations a disaggregated, decentralised resource that can be searched to allow people to share their information.

Q: When you refer to the policy information markers (PIMs), do they relate to the wider world of policy or are they DFID specific?

A: The latter. They were changed in 1997 to match the new administration.

Q: There is a big distinction between a reporting or information system as opposed to a knowledge system which helps people contribute in ways that suit and reflect their needs. How are you allowing for this organic development to take place?

A: There are a number of initiatives that draw on PRISM but tailor it according to people's particular needs. One of the most exciting developments is to add other documents that aren't necessarily project related, but which are assigned key-words and related to an area of interest.

Q: Transparency: is there any discussion about making your PRISM system available on a Website?

A: There is agreement that DFID would like to move in this direction, but the amount of data cleaning this requires is considerable. Once we're content with the quality of the information, we will make the system publicly available.

Q: Action Aid spoke about their recent experience in reporting and the impact that this was having on practice. Reporting was using skill time and codified the way people saw the world without going anywhere. They are now introducing a new type of open system - an Accountability learning and Planning System - which draws on the learning that is happening in communities, inviting people to produce information that matters to them and then encouraging the centre to make sense of what is produced. This shifts the burden of sense-making to the development organisation and away communities. Is this an issue for DFID?

A: In terms of lessons learnt, it seems there's not enough consideration as to how these should be disseminated but in terms of performance measurement, the project reviews are done with partners in an open environment. Beyond this, there is little more underway at this stage in terms of feeding lessons back.

Q: What has been the response of your staff to PRISM?

A: It was interesting to hear the feedback on launching PRISM: there was very positive feedback from all staff, but then the reality twelve months down the line is that people have not really used the system. So in practice it would seem that the organisation has not made that much difference to the way in which people are working. Staff do not seem to have made the connection between the value of the system to their daily work and are not closing the loop.

Q: If you consider all the changes that have taken place over the last five years and changes expected over the next five, when considering knowledge management, what is it we should be doing now to address needs five years hence?

A: This question will be considered later in the work shop.

Q: How did you develop markers for PRISM?

A: At present, the marker system does not include lessons learnt and practices. The proposal is to introduce these, but we are not sure how to ensure decent application of these markers. The Health system seems to pull out the type of lessons learnt and categorises them to allow people another way of viewing a problem.

Q: How are you capturing all the information that is going into PRISM and how are you keeping up to date with this?

A: We're picking up the information from existing processes. In order to get a project approved you have to complete a project profile which includes information required. This means that already exists and we're getting people to key it in. Because people didn't see this information in the past through the MIS, it got lost. Now that people are seeing it, it's making a difference and in most instances, projects are taking responsibility for keying in the data.

Q: Are there other experiences on what a knowledge strategy which meets the needs of local partners and staff could be?

A: This is really not a knowledge management strategy on its own. There are other initiatives underway in DFID, but PRISM is a component of this broader strategy. Tearfund identified that making knowledge a part of a business strategy is key otherwise a knowledge strategy has a very short shelf life. It has to be integrated into the business of what an organisation is doing and what its core business is in order for the knowledge strategy to make any sens e.

Resources:

Adrian Blundell's biography: see Appendix

Zack, Michael (1999) Managing Codified Knowledge. In: Sloan Management Review, Summer 1999.

Seely Brown, John & Duguid, Paul (2000) Balancing Act: how to capture knowledge without killing it. In: Harvard Business Review, May-June 2000.

Communities of Practice

Introduction to Communities of Practice - Louis de Merode

"We all belong to communities whether or not we are aware of it, because communities of practice are not necessarily aware of the role they play in society and in people's lives" - Louis de Merode

De Merode realised that to develop expertise on communities of practice, he had to become involved in them. He has acquired knowledge of this field by being an avid participant in communities of practice involving practitioners, consultants, marketing services, virtual facilitation, runners and fly-fishermen. He invited the audience to identify key questions and issues that they would like to have addressed during the presentation so that he could fine-tune his presentation to make it more helpful.

Synopsis:

- Communities of practice have emerged organically in organisations in response to restructuring that created communication gaps.
- Communities of practice are natural organisational phenomena that differ in make-up, process, content and style of teams.
- Communities of practice are a natural way of processing tacit knowledge in an organisation.
- Communities of practice should be nurtured and supported so that they can facilitate organisational learning.
- Organisations have to strike a fine balance between providing support and nurturing, and being too interventionist in formalising community of practice operations.
- Appropriate leadership is key to taking communities of practice through various stages
 of development, allowing them to flourish and to reach closure naturally.

De Merode addressed his presentation towards the following **questions** posed by the participants:

- 1) What are the core competencies that help shift communities of practice to the next level?
- 2) Are communities of practice closed or open systems?
- 3) How do you ensure the participation of the best people if the basis for participation is entirely voluntary?
- 4) How do you convince management to spend money on communities of practice?
- 5) How do you facilitate participation?
- 6) What is the role of the energiser/networker?
- 7) What is the difference between a team as opposed to a community of practice?
- 8) Is there a size to which communities of practice grow and how long do they usually last for?

9) To what degree do you formalise communities of practice or is there a moderating role?

De Merode uses the following **definition** to identify key components of communities of practice:

"Communities of Practice are <u>groups</u> of professionals, <u>informally bound to one another</u> through exposure to a common class of problems, <u>common pursuit</u>of solutions, and thereby themselves embodying a store of knowledge (Brooke Manville, McKinsey & co.).

In drawing a distinction between communities of practice and teams, de Merode explained that there are some entities that are borderline cases, but communities are accountable to each other rather than to the organisation. Their contribution is indirect as opposed to the teams' contribution, which is direct. Unlike in teams, communities of practice do not fulfil roles that are independent of each other. In communities of practice, you are part of a community voluntarily depending on your motivation and incentive.

Communities of Practice: What Are they Not?

Teams

- Joint accountability for results.
- Provide value directly
- Small number of people (in the tens)
- Interdependent work relations
- · Clear membership
- Everyone contributes
- Part of the structure: report to the hierarchy

Communities

- Individual accountability to each other
- Provide value indirectly, through their members
- Could be large (sometimes in the hundreds)
- Work independent of each other
- Often (not always) permeable boundaries
- Level of contribution voluntary, very variable
- Often loose ties to the structure. Typically overlap multiple hierarchies



3of 19

The emergence of communities of practice

De Merode explained that one of the forces propelling knowledge management is that organisations that have been downsized have lost the resources and some of the people who were repositories of knowledge. These resources have to be recaptured. As organisations became client driven, the functional entities that used to be combined are now split into teams, losing the functional depth of the organisation. With a change in structure, the knowledge exchanges have been weakened because divisions are no longer talking as they used to, i.e. to each other, leaving a weak link in their make-up. Communities of practice have developed, mostly organically, in efforts to fill this void left by restructuring. The new theories about learning have also uncovered the importance of the

informal ways in which people learn. As professionals rub elbows and engage socially, they learn in profound ways.

The value of communities of practice

De Merode expanded on the value that communities of practice have for people. While there is not a substantial research base in this field, it appears that people who are part of communities of practice stay in organisations for longer than those that aren't. It also appears that part of the incentive for joining a company is the spaces that are offered for learning. Communities of practice encourage people to bring quality to their work because the network feeds their passion. Organisations can shepherd their core competencies through nurturing communities of practice. The main value of communities of practice come from the messy conversations that people can have either face to-face or through virtual conversations because it is through these interactions that people can ask questions, receive answers and do their work most effectively.

What Can Communities of Practice do for You?

	Reduce organizational fragmentation							[Spread good ideas			
		Produce innovation Incre					crea	ease individual competence				
	Provide a home base for learning					ne	eds	Solve problems		S		
	Initiat	nitiate newcomers Improve					ve th	ve the quality of work life				
	Help attract and keep good per							p]	le			
P	Provide a harbor in times of change							Ir	Improve quality			
	Dev	Develop strategic competencies					Save avoidable mistakes					



5of 19

De Merode explained that Communities of practice have become the natural way in which tacit knowledge is managed. He raised the interesting example of how knowledge transfer happens through communities: we know that the sun revolves around the earth, not on the basis of observation, but validation of Galileo's theory through a community of scientists.

In sharing and creating knowledge, communities of practice:

- Ask for help when they are stuck;
- Explore topics together;
- Draw lessons together from their experiences;

- Warn each other of the blind alleys they have gone down and the failures they have experienced;
- Record what they learn together;
- Share the ideas that have worked for them; and,
- Spawn research and dissemination efforts

Communities of practice have a natural process and interfering with this is delicate.

As noted earlier, one of the key differences between teams and communities of practice is that in teams you form part of a structure and have to act according to your role. In communities of practice there is a group of leaders, core members, and occasional contributors who only debate when their views are challenged, as well as lurkers who may "hang out" in one community, but are actively engaged in another.

Key ingredients in Communities of practice:

Designing a community is akin to planning a city. Everything is a negotiation between the design and the community itself that can accept or reject aspects of the design. Key elements are:

- Purpose. Shared purpose, or passion; shared needs and clear value potential pertain. Scott Peck describes various stages of communities of practice: pseudo-communities (in which people remain at the level of politeness), chaos (where people decide that they need to defend their views), emptiness (people empty themselves of the desire of changing others) and community building.
- Enablers include technology, time, budget, support and incentives.
- Leadership of the community (dealt with in greater depth below).
- Processes. People may want to use different means of communicating which is why flexible communication strategies are as important as storytelling and learning conversations.
- People. Competencies, affinities, commitment, behaviours and diversity of perspectives are all elements that people bring to communities of practice.

Time, cited as an enabler in the listing above, is a key issue. De Merode asked: "How do we add to what we do if no-one is willing to take anything off our plates?" He answered that you have to believe that the work you do will be transformed by the time you spend in your communities. Staff have to be able to convince management that the exchanges they are engaged in are valuable. Many exchanges take place in conversations with fellow workers outside of office hours. Knowledge management is more about the exchanges that happen, often informally, between people and this has to become the way that organisations are prepared to work. Most organisations will start with these changes, what he called 'taking a leap of faith', on a small scale.

The **core competency** of communities of practice is really developing learning principles and a learning conversation rather than being on the defensive and resorting to defensive routines. De Merode explained that organisations must be prepared to share, be

transparent, invite dissent, help others make informed decisions, and take personal responsibility for the above. Most organisations, about 80%, are in what he calls the 'defensive mode'.

These different approaches are best captured in the following slide:

The Behavioral Divide

Defensive Routines

- r Avoid embarrassment
- r Don't put people on the spot
- r Debate to win
- r Stay in control
- r Talk in the abstract
- Keep negative feelings to yourself
- r Blame and deflect blame



Learning Principles

- Share your data in public, make them testable. Use examples, illustrations, stories
- r Make your reasoning transparent, contestable
- r Invite dissenting opinions
- r Help others make free, informed decisions
- Take personal responsibility for the above



11of 19

He proposed that in terms of promoting a behavioural change strategy you have to start with what you have:

- Form communities of practice where commitment is high;
- Coach the leaders of communities of practice so that they can demonstrate benefit to their communities;
- Disincentives have to be removed:
- Management support has to provide a secure environment in which people feel safe to expose their vulnerabilities;
- Leaders should model learning behaviours; and,
- A community of community leaders should be established to allow these people to exchange their experiences.

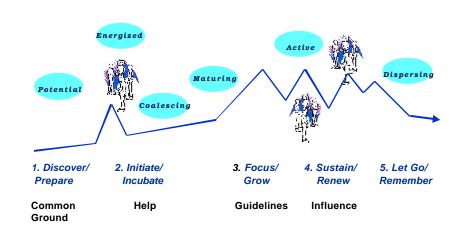
Leadership roles and responsibilities in fostering Communities of practice

De Merode then spoke about the community "dance" to explain that the process of harvesting the learning that happens doesn't necessarily come naturally to communities of practice. He alerted the workshop to the following features of communities of practice:

- Virtual conversations can become very disjointed and the leader must ensure that the threads are easily woven to overcome possible fragmentation.
- In a virtual environment people get hurt because it is easy to misread intentions and leaders must manage this. Events should be created to keep the life of the community healthy. A community can be actively nurtured to improve participation and the experiences of members.
- Communities of practice have to be marketed so that levels of participation are improved.
- Leaders also have to believe that communities of practice add value to the core business of an organisation so that they can honestly defend the space needed for communities of practice to function effectively.
- The task of communities of practice is to contribute to an organisation so that it becomes more sophisticated at doing what it does better. Communities of practice need to move beyond helping each other to developing a more proactive forward-looking role: away from parochialism towards boundlessness.

Stage of development

Communities of Practice: Stages of Development *



SILVER CREEK

* Richard McDermott & Etienne Wenger

16of 19

There is always a flush of enthusiasm for new communities of practice when they come into being. Invariably this wears off and Scott Peck's 'emptiness' phase is experienced. Reflection and refocusing become important and integration into the organisation has to

be addressed. The rationale for involvement becomes pertinent and the community of practice as a whole deals with the rhythms of its life.

Discussion

The discussion of this presentation will be found at the end of the following section as questions and comments followed both presentations.

Resources:

Louis de Merode's biography: see Appendix

Wenger, Etienne & Snyder, William (2000) Communities of Practice: the organisational frontier. In: Harvard Business Review, January-February 2000

Case study on Communities of Practice: UNDP on the network - Steve Glovinsky

Steve Glovinsky, Co-ordinator of the United Nations Development Programme (UNDP) system of Sub-regional Resource Facilities (SURF) since 1998, brings a range of experience and insight to his present position. His presentation focused on the ways in which communities of practice evolved in the UNDP context, developing particular approaches to the common tensions of bureaucracy and autonomy.

Synopsis:

- UNDP's networks or communities of practice have emerged organically but with centralised support and co-ordination of efforts.
- Throughout the SURF system, which acts as an umbrella to the networks, UNDP is attempting to build interfaces between the organisation's centre and its country offices.
- Networks break down 'silo culture' in organisations and offer new ways of working which are not always recognised as adding value.
- Networks and communities of practice promote organisational learning.
- UNDP is using the network idea to expand its knowledge base beyond the organisation by drawing on expertise from outside of its structures.
- Alongside their natural development and dynamic nature, networks require protocols to ensure that organisational values and practices are upheld.

Workings of the SURF system

The UNDP's SURF system has emerged from a process of reorganisation through which the organisation has changed, and is still changing, its profile. The technical support provided in countries had lost touch with the centre of the organisation. Throughout the SURF system, there is an effort to reconnect the support function to the country offices. These efforts constitute four key services:

- Referrals and access to substantive programme-related information providing comparative experiences
- **Technical support** for programme identification, formulation, review helping countries formulate their programmes, identify priorities, write documents
- Networking and information-sharing between staff and development partners
- Identification/documentation/distribution of **best practices** in UNDP focus areas to move the learning of the organisation forward.

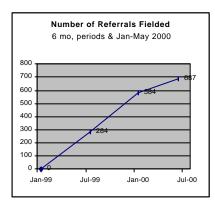
The SURF System Mission is:

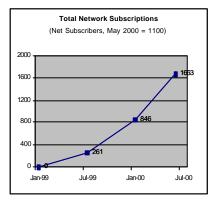
To provide timely, high quality substantive support to all UNDP Country Offices thereby strengthening UNDP's position as a trusted partner of programme countries overcoming development challenges.

The nine SURF locations spread globally are centres of expertise available for country and regional offices. The centre invited teams to pose questions that initiated a process of people answering each other's questions. This triggered a notion that the networks could be grown and there are now **six global networks** involving groups of **volunteers** using E-mail. The areas covered are environment, enterprise development or micro-finance, information technology, poverty/social development, national human development reports and governance. There is no doubt that the SURF initiative **adds work** and takes time. Each network has an extra person called a **facilitator** who keeps the networks motivated and going.

Glovinsky used an example of an E-mail coming from Cote d'Ivoire to show how network contact is developing in response to people's requests. Conversations start up which develop a dynamic of their own depicting real knowledge sharing. This dynamic has led to significant network growth as seen in the slide below:







Country officers can pose questions to their Surf Office, to policy bureau people in New York and to the networks. There is an emphasis on real questions being answered within a period of five days. The dynamic of working through these networks has meant that people have new expectations and are now wanting their questions answered very quickly or they go elsewhere. The networks are seen as a valuable source of information with matching speed and quality.

This development is leading to a situation in which UNDP is looking at country office support along the lines of small, highly networked SURF offices. Regional contacts are being built and conversations are being archived. There is an emphasis on providing information on demand that makes the networks very alive. The knowledge component rests in the interactive quality of these networks that are addressing real needs in a dynamic way.

UNDP's experience of communities of practice

UNDP has found that the communities of practice have a dynamic of their own in which they are breaking down the organisation's 'silo culture' and communicating across barriers that people would not have thought of transcending previously. Many people are not talking about doing things, they are busy communicating and discovering in this process how much they actually know about what works and what doesn't. In this way they are building professional competencies and promoting organisational learning. Beyond the Email contact, groups are developing homepages and Web sites to promote the establishment of a group identity. It is hoped that these communities of practice will eventually set standards for themselves on the basis of what has and has not worked for them.

Building the knowledge base through partnerships

Players in communities of practice are becoming involved in or leaning towards partnership building because UNDP is building on the successes of the communities of practice and expanding their ambit to work with experts outside of the organisation. In this way, the organisation is able to expand its knowledge base while remaining lean and flexible.

There is a greater awareness of networks within the organisation and UNDP is looking at this as a way of building conversations between people in the organisation. The idea is leading to exchange within the organisation and there is something of a ripple effect so that as people perceive the value of the facility, they are looking for further needs-based networks.

Challenges

As with most organisations, UNDP is encountering some challenges posed by the networks:

- This is still a new way of working and there are structural and policy constraints that have to be overcome.
- Many people are finding that the networks are replacing the experts and this is very threatening to those who want to hold on to their expertise and who are reluctant to join the communities of practice.
- The performance incentives are a problem because until people start recognising that this is a beneficial way of working, there is very little incentive to continue working this way.
- Feedback and recognition are problem areas because protocol has not yet been developed to ensure, for instance, that expertise is acknowledged.

The importance of the SURFs is now included in UNDP's business plan in efforts to attract external funding to promote this practice within the organisation.

Discussion

Q: Research institutions are an obvious partner to include in communities of practice. Are you including this type of organisation?

A: Since our own expertise is being reduced, we are being forced to look outside of the organisation for help. This is part of what is driving our new strategy.

Q: How are you deciding on the themes? They seem to be quite clearly defined, rather than letting them grow organically. How do you strike a balance between these two approaches?

A: These were constructed because they are competency based and the organisation can be helped to develop competency in its core business areas. Others will come and go, but the facilitators are focusing on these as a way of doing our work.

Q: What is the difference between the facilitators' model in the regions and what the senior policy specialists might see as decentralised policy specialists?

A: The policy specialists are going out to the regions; it's an issue of accountability because they are supposed to support country specialists. The co-ordinators and facilitators have the job of ensuring that the inquirer gets the best answer and this is their only job. If they can't get this from the policy specialist, they go elsewhere. The term facilitator is used differently in different contexts.

Q: In trying to set up a community of practice around peace building, it just broke up because of conflict. It was difficult to know how best to intervene to help people through this phase. How best does management help the communities of practice through this phase of conflict?

A: In "The different drum", Scott Peck, who has spent the last ten years birthing communities of practice and helping people identify what they should do to nurture these, explains that putting people in touch with the experience they are going through and showing them where this leads as well as giving them hope, is an important way of managing the communities of practice process.

Q: Teams and communities of practice are extremes, but there are things in between as well which have roles and responsibilities and are accountable for outputs. Have you encountered such forms in real life and are they legitimate?

A: You cannot be dogmatic about these issues so one cannot say that only some forms of organisation are allowed. The form and shape of an organisational group has to emerge from a negotiation between the communities that form and management. Some communities of practice are very rigid although they should be open. In some cases, organisations chose closed systems if this is going to better serve their purpose. The professional associations are often groups that set standards for communities of practice.

Q: What are the incentives for people to participate in groups such as communities of practice?

A: One of the consistent findings about knowledge management is that people entering into the organisation are the biggest consumers of knowledge because it socialises them

in the organisation and familiarises them with the workings of the organisation. So it is part of their induction and learning process. Membership is a valuable way to plan and move forward in your career.

Q: When you talk about facilitators, do you have one full-time person for each network?

A: Yes we assign one to each group even though different companies call them different things. We have a job description for facilitators requiring networking skills, indexing and search skills, Web maintenance and facilitation skills. It's a lot of work especially for big communities that have to be nurtured.

Q: If you're setting up a system in which people can ask any question, does this not become overwhelming and how do you handle quality control when the experts may be too busy to reply?

A: These are both important topics. In terms of the traffic, the facilitators collect answers and produce an abstract in response to a question. The quality control issue has two parts:

- Communication is built on trust. If someone you trust recommends something, you can trust it. This is the first filter.
- 2) The second one gets back to the role of the policy specialist who has to lead these groups and they bring their opinions to these discussions. When they bring their expertise in ways that work, quality control works well.

Q: Is knowledge free?; when you speak about including expertise, do you pay for this?

A: If consultants provide good advice, they could get hired. This leads to an incentive to share knowledge rather than retain or control it. UNDP's costs at present are the costs of facilitators to head up the communities of practice.

You can find auction sites where knowledge is being auctioned for a bid. There is also the notion that your ideas are multiplied if you share them and they are more valuable if you share rather than keep them to yourself. There is a large tacit element of what one shares which invariably means that people come back to knowledge providers.

Q: In terms of the relationship between the communities of practice and institutions, how do you reconcile two diverging goals of communities of practice: having autonomy or independence, and the organisation's desire to institutionalise them?

A: In organisations in which the level of trust is not very high, anything that management says is not necessarily going to be trusted. Management will be watched until they develop legitimacy. Some communities of practice have very serious reservations about being institutionalised in programmes, but they come around especially if others have taken the lead and established a precedent for the use of communities of practice as a means of interaction within an organisation.

Q: Looking at the SURF model, it is a more cost effective way of delivering information to governments, but they remain dependent on you for future knowledge. Is this part of the old or new model?

A: We are looking at an evolution as people develop the idea that they can exchange knowledge through a network. It seems that this will possibly develop and expand further.

Resources:

Steve Glovinsky's biography: see Appendix

Facilitation as enabler

Strategies for Virtual Collaboration - Steve Song

Steve Song comes to knowledge management from an information and communication technology (ICT) background. It is in the light of the possibilities that ICTs present for collaboration in addition to organisational experience in using these technologies, that Song addresses various strategies to support virtual collaboration.

Synopsis:

- ICTs can pose problems as well as offer solutions to communication requirements.
- Virtual work requires organisational attention and resources to ensure that ICTs add value to the purposes for which they are being used.
- Organisations should employ as wide a range of communications media as possible, including face-to-face interaction.
- Online collaboration requires championing and careful facilitation.
- Policies that enable the effective use of ICTs to promote collaboration should address issues of resourcing, capacity development, and time and space considerations.
- Communication, whether across time and space or in face-to-face contact, is timeconsuming but essential to knowledge sharing.

Myths and misconceptions of virtual collaboration

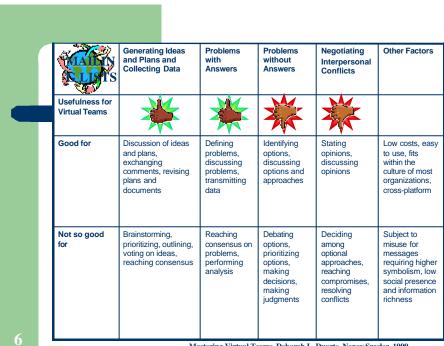
In terms of myths about virtual workplaces, Song identified the following problems:

- People tend to imagine that online work requires less time and effort than regular work; often the reverse is true.
- Virtual collaborations are less effective than face-to-face communications. Psychologists have estimated written communication delivers as little as 25% as much information as the same communication delivered in a face-to-face environment.
- So much less information about the people involved (e.g. gender, culture, perspective) is available in a virtual environment that you have to work much harder to communicate and collaborate effectively.

Song suggested that you have to recognise virtual work as a blank space and think of ways of increasing familiarity, so that you create an atmosphere in which there is the kind of trust that grows between people who know each other.

Working with the 'lowest practical denominator'

For those working in the development world, the lowest practical denominator for communications must be established. In most cases, this will be E-mail and ways have to be identified of supporting the weaknesses and exploiting the strengths of this medium. It seems that people try to use E-mail to solve problems that require a sophisticated level of debate without realising that there will be misunderstandings which assume a dynamic of their own. It is an environment conducive to conflicts. It is important to recognise that E-mail requires a substantial degree of facilitation to deal with these difficulties.



Mastering Virtual Teams, Deborah L. Duarte, Nancy Snyder, 1999

Song proposed that organisations should use a spectrum of technologies for virtual collaboration, which should include face-to-face meetings. It is difficult to have a virtual environment without having faceto-face meetings. The telephone, E-mail, video and print should all be used as they reinforce discussions. The Web is also a valuable means of communication. In using these various technologies, facilitators and participants should try to humanise relationships as much as possible.

The two key roles: champions and facilitators

A key role for facilitating the working environment is the champion who ensures that people feel motivated to participate. Their role is to make the environment secure and to promote use of the workspace.

The role of the facilitator is probably the most difficult role in the virtual workspace. This is the person who has to build trust within the community. The ways in which this is done vary from communities of practice, to working teams, to planning groups.

There are various rules that must be taken into account to help groups work effectively. Facilitators should:

- clearly communicate purpose so that people know why they are participating and where the interaction will go;
- ensure that the decision-making process (should there be one) is clear;
- ensure that time is not virtual and that people respond as and when they need to;
- keep things moving so that there aren't gaps and unnecessary silences;

- set precedents for communicating so that people relate well; and,
- anticipate when things may go wrong to pre-empt these occurrences.

Examples of facilitation

An impressive example of a good E-mail based consultation process and discussion is 'The DFID White Paper process on Globalisation using ICTs and knowledge'. Its strengths included a champion and being clear about what DFID wanted and what they were going to do with the inputs. The discussion was also well facilitated with regular summaries. It commanded the participation of a large number of people and moved the debate forward. Weaknesses inlcuded the fact that DFID didn't make as much use of alternative technologies as it could have and five overlapping discussion lists underway simultaneously.

The African Development Forum process, which used discussion lists as a precursor to a conference, seemed to be less successful. It was not clear what the pre-discussions were aiming to do. Contributions were ad hoc and there was just too much chaos with discussions becoming personal. Rather than have multiple discussions run simultaneously, two-week slots were allocated to different issues. Issues were approached rather differently than in DFID's case, which invited ideas, as opposed to leading an email-based debate on very difficult issues.

How do you make virtual workplaces work?

Song proposed that organisations have to institutionalise support for virtual work and recognise the amount of work necessary to ensure participation and success. Also, organisations have to build capacity for facilitation, technical support, and create context for these workspaces to operate in. However, participants must be able to create their own environments; therefore, the levels of support should not be top down and must develop in accordance with the requirements of particular discussions. Some types of virtual work will be informal requiring less support than other types. Organisations must be sensitive to these differences and ensure that they do not crush initiatives with rigid, formal policy.

Discussion

Q: In the role of facilitator, how do you deal with people who dominate discussion and intimidate everyone else? What about the demise of discussion lists which are not working or which need closure. These are people who are knowledgeable and polite and adding value, but preventing others from feeling confident about participating.

A: Collaborative e-mail environments have a useful, built-in tool, namely, taking conversation offline. This involves engaging the primary participants to help with getting more people involved. Experts could be encouraged to mentor other participants to encourage them to become more vocal.

In terms of when to end a discussion, you have to be as concrete as possible and lay this out at the beginning of the discussion. In terms of communities of practice which have an ongoing life, levels of participation will fluctuate and you have to decide when to end them. The facilitator has to have permission to give feedback to members about whether or not they are adhering to the standards set by the discussion. Many organisations are finding

that it is not always good to appoint experts to these groups because it stifles broad participation.

Q: Is there a right time and a right place for these groups to work?

A: It is always to some degree a gamble. Sometimes the chemistry is simply missing and you cannot increase your chances of building relationships. It is difficult for discussion groups to take off without face to face meetings and a good rationale. It's inhibiting when you don't know people but good facilitation helps a great deal.

Comment: The tools are valuable in communities of practice and in other groups that have to work virtually, and "netiquette" rules are important to practice across organisations. It is not only in the context of communities of practice but also in many other working groups that the use of these tools is valuable.

A rule that you can use in virtual space is that participants should always assume good intent.

Q: One of the barriers to knowledge sharing is the issue of language, especially for countries in the South which may be operating in local languages. How do you address this issue?

A: A project called *MISTICA*, funded by the IDRC, is attempting to address this problem in Latin America. They have a facilitator who summarises the messages and provides rough translations, posting these in the three or four different languages used to enhance participation. But this is very difficult, because a lot of discussion and content is lost in this way.

Resources:

Steve Song's biography: see Appendix

Duarte, Deborah L., and Nancy Tennant Snyder. <u>Mastering virtual teams: strategies, tools, and techniques that succeed</u>. 1st ed. San Francisco: Jossey-Bass, 1999

Jude-York, Deborah, Lauren D. Davis, and Susan L. Wise. <u>Virtual Teaming. Breaking the Boundaries of Time and Place</u> A Fifty-Minute Series Book. Menlo Park, CA: Crisp Publications Inc., 2000

Song, Steve. "Guidelines on the use of electronic networking to facilitate regional or global research networks". 1999. Available: http://www.idrc.ca/books/focus/890/15aSong.html

Of Greenhouses and a lack of words: developing the Intranet for P&D at GTZ -Manfred Habig

Manfred Habig is Project Leader of the Strategic Project on Knowledge Management in The German Agency for Technical Cooperation (GTZ). The GTZ's department of Planning and Development (P&D) - from which Habig hails - involves connecting many islands of knowledge in a hierarchical organisation shifting towards becoming an efficient, non-profit enterprise consulting in development. This knowledge management project seeks to help management deal with, and make effective use of, the different kinds of knowledge residing in the organisation.

Synopsis:

- GTZ found through developing an intranet, that a number of staff had little practice in speaking about their work, so that the process itself became useful.
- In organising information, many staff became familiar with the workings of knowledge within an organisation, starting to identify ways in which knowledge resources could benefit their work.
- The development of an intranet raises similar problems to thesaurus construction: departments compete to define their work using the most popular keywords in efforts to secure funding and further resources.
- Solutions such as the use of themes as opposed to keywords, and allowing for free searching rather than using a controlled vocabulary, allow organisations to move beyond basic constraints.
- Resources (time, money, expertise, technology) have to be committed to intranet development.

P&D was interested in developing a decentralised intranet system which could cope with the organisational dynamic of recycling existing knowledge and generating new knowledge. Managers were keen to develop a permanent knowledge mapping exercise by all those involved in knowledge production and use. They were in search of a model that captures what people really know and settled for the model of a greenhouse, which is dynamic and would allow all employees to generate and update information, as well as use the intranet profitably. They opted for a thematic approach as more precise and dynamic than key words.

P&D started with a database, authoring system and a standard template with basic text format and link functions. The system delivers:

- a thematic phone directory which provides at least a name and phone number for every theme;
- a thematic net space for authors;
- a host of possibilities to create access to this thematic space including automatic siteindexing, a thematic search engine and a thesaurus.

Impediments encountered in developing the system

The most prominent impediment discovered in this process was language:

- Everyone wanted to use the same key words, as the ones chosen were regarded as more important than others; and,
- People had difficulty talking about their work, owing to a lack of practice.

P & D tried to address these problems by:

- Letting go of controlled vocabulary and insisting on precision in the use of terms to describe themes; and,
- Having the material speak for itself so that new topics could be identified.

Further impediments:

- 1) Some common fallacies encountered among staff about the intranet included beliefs that:
 - the net is a glossy brochure;
 - the only feature of the net was that you could put a link under a special word to have a window open and explain it;
 - it is mainly about multiplying the amount of worthless communication;
 - one should preferably link everything with everything;
 - real world co-operation could be replaced by a number of links from page to page; and,
 - the machine would do the thinking in your place.
- 2) Through the process of development it became clear that technicians did not seem to understand the needs of users. In light of this, the department undertook a jointly managed and controlled process for the development of the system, involving user representatives and technicians. Through this process, people with a better understanding of both the users and the technical side emerged.
- 3) It appeared also that people seemed defensive and reluctant about the intranet project because change is seen as a top-down process. People had to be taken through a process of debate and interaction with the intranet to convince them of its potential and usefulness to their work.
- 4) An initial budget has to be set aside to create the intranet infrastructure allowing for input from planners, support and advisory staff. Developing net literacy is timeconsuming.
- 5) Intranet development implies a shift in qualification and new work roles were not compensated, leading to a brain drain with people leaving as they developed new skills.

6) It was found that planners produce much written work but don't appear to have time to read, so that intended knowledge sharing through codification is not necessarily occurring.

Conclusion

GTZ discovered that making existing knowledge accessible is more difficult than it first appears. There is a very real problem of a lack of time and knowledge management seems time-consuming when seen as something that people do over and above their work. The vision of a greenhouse in which knowledge can be represented as different from the official line encourages greater interaction.

Discussion:

Q: What happened in the end? Did you get outputs?

A: We are not at the end of the project. We might have 10% of what we plan to have. Each department will have its presence in the intranet by a particular stage. The project is mainly supply-driven rather than demand-driven. The organisation is in a process of deep reflection about identity. There is a group of people moving into information brokerage because they see the value of this kind of work. We are trying to create a platform for collaboration rather than encouraging a publishing approach.

Q: What percentage of your knowledge represents this activity?

A: It is one of the main activities in P&D with others being networking and debriefing.

Q: I was interested to see that you've chosen a decentralised model for providing content. People will only submit if they see something useful coming out of a service. How do you deal with the need to give consideration to quality control?

A: The ones who enter information on a certain subject are those considered the experts. If you are responsible for a certain subject in the organisation, you have to produce those 'pages'. It is hoped that in this way, people are themselves introducing quality control in their work.

Comment: We seem to be very concerned with the supply of knowledge and we are not concerned with knowledge being demand driven. It is important to draw the distinction between what we know and what we need to know.

Comment: On the power of well-asked questions, in GTZ we are concerned with debriefing where people are changing positions and learning from those who work in organisational development to understand how to ask questions in ways that are helpful, and that generate discussions with answers.

Strategy and supply orientation sometimes work and does not mean producing more information, but adding value through reduction. People seem to want 'less' but 'better'.

Rhetorical Q: There have been a number of presentations concerning activities that fall under the umbrella of knowledge management. Is it wise to undertake strategies which may not take account of the real needs and which may lead to wasteful expenditure?

Comment: People don't need to do pilot projects any longer as they've already learnt a lot this way.

Resources:

Manfred Habig's biography: see Appendix

Fostering Leadership and Culture

Overview: fostering leadership and culture -Lyle Makosky

This theme dealt with how the leader of the organisation and executive team is won over to the idea of knowledge management as a strategy and practice. Leadership has to think about knowledge sharing not only as an idea or strategy, but as a way of doing the work of the organisation better. Knowledge management has to be viewed as the way of supporting and undertaking the work of the organisation, its services and mission. To achieve this senior level endorsement, leaders have to secure the interest and buy-in of decision-makers. Further to this, the culture of the organisation has to allow for the use of knowledge management as a valuable means of advancing the work of the organisation.

The following section considers:

- Approaches and experience to get the leader and executive team on side
- Creating awareness and understanding of knowledge management in the organization
- Identifying and fostering incentives

Knowledge management represents an important organisational philosophy and approach and is strategically related to **how** an organisation does business. As such, whether and how to adopt knowledge management is part of corporate thinking and impacts on the development of organisational core competencies. For this reason, the development of a knowledge management strategy warrants executive consideration and leadership as to its scope and direction. A selected knowledge management strategy typically requires a new way of working and/or a strengthening of certain current knowledge oriented approaches. This calls for cultural reinforcement and an emphasis on the associated values of 'sharing knowledge', providing time and freedom to interact and exchange. Such cultural inducements necessitate clear and demonstrated leadership buy-in and commitment to the knowledge management strategy, as well as a strong hand in guiding its direction.

Panel: Getting leadership and organisational buy-in - Jean-Pierre Beguin, Steve Denning, Adrian Poplawski

Each of the panelists presented their views and organisational experiences on how best to achieve acculturation of organisations to knowledge management strategies and practices.

Synopsis:

- Storytelling creates rapport between the teller and the listener and allows the audience to 'own' the story.
- Storytelling helps people, including management, relate to ideas and concepts in a natural, unthreatening way promoting understanding rather than analysis.
- Storytelling connects people across contexts and boundaries so that they are able to occupy 'alien' spaces and entertain 'foreign' concepts.
- Communities of practice connect people across time and space and build networks to fill organisational gaps.
- Human resource development provides training that addresses inadequacies people may experience in the context of organisational change.
- Codification strategies attend to problems of institutional memory loss.
- Knowledge management strategies must include solutions that integrate organisational units and efforts.
- Buy-in from senior management can be secured through successful strategies and stories that demonstrate the potential of knowledge management to foster organisational development.

Steve Denning on Storytelling:

Denning started by referring to the workshop's concern with the meaning of knowledge. He previously thought that knowledge was abstract and analytical, and that anything anecdotal was bad. This view is endorsed by universities and educational practice and is also upheld in organisations. Storytelling was believed to be only for entertainment. He asked the audience how many could remember his definition of knowledge offered in his previous talk as opposed to what had become referred to as 'the Pakistan story'. It is the Pakistani story rather than the definition of knowledge management that people remembered. There is something more to storytelling than is at first apparent and it is the power of this medium that Denning explored in his talk.

Denning believes that the change within World Bank, which was regarded as a changeresistant organisation, had something to do with storytelling.

It seems that stories not only entertain, convey information and preserve cultures, but also provide a springboard for change in organisations. In the World Band there were a series of crises that were resolved through storytelling. The leadership was convinced of the idea of developing knowledge strategies and senior management decided that middle management had to become immersed in knowledge management. To promote thinking about knowledge management, three groups were put in place dealing with budget, personnel and the concept of knowledge management. The third group comprised an

unreceptive audience who were only able to relate to the idea of knowledge management through storytelling.

Towards the end of 1997 there was further concern within the organisation as to what the knowledge sharing impetus was about. Another meeting was called by senior management for a further storytelling session, in response to the need for cohesion around the theme of knowledge management. The Yemen story achieved this objective. In 1998, the Pakistan story was told and in 1999 the Madagascar story was told, in response to anxiety within the organisation as to the purpose and value of pursuing a knowledge management course. Again the story-telling method succeeded in winning management over to the idea of knowledge management.

How storytelling works

Storytelling connects people across contexts and geographical boundaries so that although people are located in one place, they are able to become part of other contexts. The collaborative spirit of listening to and following stories allows people to enter a different kind of mood and space. Denning quoted Carl Jung to make the point:

"There is some part of the human self which is not subject to the laws of time and space".

When you are following a story, the laws of time and space are absent and you experience an idea as something that you are partially living.

Denning explained that in trying to bring the concept of knowledge management to people, he used different techniques to convey this concept. It seems that people don't enjoy presentations that use words. They prefer charts, but generally find charts quite foreign if they are unfamiliar with the concept being discussed. Even attempts to make charts more accurate don't necessarily help make the ideas more accessible.

On the other hand, people are keen to listen to stories. Even a 29-word story can capture and convey a range of complex ideas. Stories rely on the fact that listeners have a huge resource or knowledge base that allows them to relate to a 'story'. It is not to the explicit, but the implicit story that people relate their environments and contexts to generate new ideas and open up new possibilities. As people listen to stories, they are already taking mental leaps to use the story in their own contexts. Storytelling processes are collaborative in that the audiences are creating new stories as they listen to the story being told. People identify gaps in the story, and they make things happen at a 'dream' level to close these gaps themselves. Storytelling can also be seen as a dance. It is highly collaborative and listeners can fill in the gaps of the stories.

Given concerns with closing the knowledge action gap, Denning proposed that it is better to eliminate this gap. The adversarial mode does little to promote collaboration. On the other hand, through the telling of a story that has a springboard effect, a different dynamic is set in motion and there is no gap between knowledge and action. Through storytelling, ideas are handed to people so that they can make their own sense of the story. They appropriate the story to make sense of their own situations. What happens is that people start to tell the same story and a conversation happens around the story itself. Over and above this, the story has become part of the individual. Denning used a Brazilian proverb to sum up, saying that:

When we dream alone it is only a dream. When we dream together, it is no longer a dream but the beginning of a reality.

Storytelling creates a process of collective dreaming that leads to a new reality.

Does storytelling always work?

Excited by the power of story-telling, in 1998 the World Bank tried to use the storytelling mode by capturing stories in booklets, to little or no effect. The same problem was experienced with video, also having little effect. This led to the thinking that organisations are of two parts: the people and the machinery (things, procedures, buildings, artefacts, materials). When you put stories out in booklets, it becomes yet another artefact that is simply part of the machinery. On the other hand, the ancient art of storytelling plugs directly into the living part of the organisation, into the people allowing you to make connections.

Not all stories work in the same way. There are a number of rules that overcome possible limitations to making stories work:

- 1) Crafting the story in the right way;
- 2) Letting go of control;
- 3) It doesn't work with the incorrigibles;
- 4) It has to be performed with conviction; and,
- 5) The narrative has to be married with analysis.

To have a springboard effect, a story should be:

- Understandable to the audience;
- Eerily familiar;
- Embody the change idea; and,
- Have an element of strangeness yet plausibility.

Yet, stories must be told as simply as possible so that there is enough space for people to make their own leaps and connections. They must also have a happy ending.

In storytelling, the teller has to let go of control. The teller cannot explain implications of the story as it then becomes the teller's idea. The trick is to let people work things out for themselves: don't impose ideas about the story and trust the listener to draw their own conclusions.

There are some groups (those whom Denning called the incorrigibles) who do not react to the stories. These people should be allowed to be as not everyone will be won over during a change process.

The stories should always be performed with conviction and you must allow the listener to fill in the gaps.

Storytelling is not a panacea. You have to try to marry analysis with narrative. It is not about throwing out analysis, but allowing people inside an idea so that they can analyse it in a sympathetic mode. Through narrative, by allowing people to get inside the story, they start working with concepts and doing analysis quite automatically.

Some people believe that they aren't able to tell stories, BUT **everyone can tell stories**. Denning cited KM expert Larry Pruzak who says that we are all storytellers:

Story is the basic unit of human thought.

What are the implications of storytelling?

- 1) Organisational communications: people tell stories anyway;
- 2) Our native language is storytelling; our learned language is abstract analysis, explaining why the latter is so tiring while storytelling is so energising;
- 3) Community building: sharing stories allows people to build trust;
- 4) Education: exceptional teachers use stories to teach;
- 5) Balance of personal and work life: Denning dted Lao Tzu to explain the need to achieve success without vanity, aggression, arrogance, gain and force. He explained how arguing involves a conflict that is adversarial and about losing. However, in storytelling mode, people are collaborating and the space is not about winning and losing. Instead balance is brought into the work place allowing everyone to bring their own energy to synergise components of the organisation. It seems that this is the secret to bringing collaborative change to an organisation.

Jean Pierre Beguin on solving organisational issues with knowledge action

Beguin, from the Inter-American Development Bank (IADB), proposed that there is a very practical side to knowledge management (or what he refers to as knowledge action), which offers practical solutions to real problems. He outlined three primary problem areas for the IADB and explained how a culturally sensitive knowledge action approach was used to pose solutions to these.

1) Dispersion of technical expertise:

Reorganisation of the IADB in 1994 along geographical lines brought good results but there was a price to be paid. There are presently three regional operational units with expertise dispersed across these regions rather than concentrated in one area.

2) Isolation of the Bank's Country Offices vis-à-vis its Headquarters:

The county offices are isolated in relation to the head office in Washington. This is improving, but country officers encounter some severe frustrations in their work.

3) Loss of institutional memory:

In the last few years, 50% of staff have moved out of the bank and been replaced by newcomers. A dynamic rotation policy within the IADB has also caused people to move on to other positions. This has proved particularly problematic in a context where most

knowledge creation comes from verbal communications. The result of these changes is that tacit knowledge is being lost in the organisation.

Dealing with the issues

The IADB has a fairly decentralised system with departments experiencing a good deal of autonomy. Messages are not expected to come from the top. There is unity but there is also an institutional synergy and simultaneous autonomy. In keeping with this culture, an umbrella structure called KENSTEER, based on the 'Knowledge Exchange Network' idea, was created to deal with knowledge exchange in the organisation¹¹. It is an interdepartmental co-ordinating structure bringing together various knowledge activities across the organisation.

The following solutions were proposed for the three problem areas outlined above:

1) Solution to the dispersion of technical expertise:

A recent development within the IADB is the growth of networks, or communities of practice, which are very active and dynamic. Care has been taken not to bureaucratise this process of development and support is given to the networks in ways that do not jeopardise their natural dynamism.

2) Solution to the isolation of the Country Offices:

IADB's dynamic Office of Learning has started doing project team training and transferring lessons to new project teams. In addition, a Website is being developed, an intranet focused on project execution and monitoring. This will be available to staff of the IADB and to staff of the executing agencies of the benefiting countries. The site will include guidelines, chat areas, and frequently asked questions, as well as a directory of expertise.

3) Solution to the loss of institutional memory:

A new records management system is being developed in an effort to retain knowledge being lost. Interviews are also being held with people who are leaving the organisation or being rotated, so that they can leave rich sources of information with the organisation. These will be codified.

Conclusions

Experiences have shown that knowledge action develops and grows under the influence of local initiatives and grassroots efforts, with the approval of management and with a flexible umbrella under which initiatives are co-ordinated and directed. The present IADB system has some limitations such as the absence of a central budget for knowledge exchange. Nor is there a central focal unit to integrate the knowledge action initiatives with normal organisational duties. However, there is genuine interest in knowledge management even though senior management has not as yet issued a statement to this effect.

It seems there is consensus on the general problems and solutions in the knowledge management area. Beguin urged the participants to re-examine the ways in which their organisations are working. He suggested that organisations could improve their operations

¹¹ For further insight into Kensteer, refer to the Washington report.

through knowledge management and said that this would represent a remarkable achievement.

Adrian Poplawski on dealing with change

Many of the issues at CIDA go back to the Y2K problem, which was not a disaster after all. It brought attention to how CIDA was managing its own information and knowledge, and the organisation looked at the tools it had and the institutional memory it was losing. The organisation never had a culture of training. It created a project called Phoenix to address Y2K and the lack of training, and to consider what was happening with knowledge in CIDA. Phoenix showed that there were insufficient systems to manage the information and knowledge being generated. Different systems (including some 400 databases) did not speak to each other and contradictory information was being generated in answer to queries.

The immediate solution was to implement SAP, which caused an agency-wide shake up. It was thought that implementation would lead to a calming effect after installation. Implementation made a dramatic change to the organisation, which is still experiencing a series of shocks. CIDA is now saying to staff that they should start dealing with change as a constant. Most of the organisation's knowledge is tacit and resides in people. SAP required buy-in at senior levels. The President made a commitment to supporting both Phoenix and the implementation of SAP, as well as the knowledge management issue. The result was that someone was appointed from outside the organisation to head up the knowledge management initiative. Two senior managers at the vice-presidential level within CIDA were also responsible for the knowledge management exercise. The challenge for the person coming in was having to gain credibility in the organisation. The process has been instructive but people are having difficulty with not yet knowing how to integrate knowledge management into their work within the organisation. Also, there is a need to make change management relevant to people in their day-to-day jobs. Dealing with this change on a daily basis is still proving difficult.

Discussion

Comment: In Action Aid the storytelling mode has been working well. The Impact Assessment unit has created a space for people to interact. About the incorrigibles: it seems these people have the most deeply embedded stories and narratives and myths. They show that you cannot discount analysis because you do need analysis to counter the stories and myths that can be spread within organisations.

Comment: At Tearfund, people try to articulate visions as stories because stories about the future also help people latch onto new ideas and new ways of seeing.

Comment: About happy endings: in the evaluation discipline, even those stories without happy endings offer much to learn from. It seems that negative ending stories do teach very good lessons. Can these stories not also be useful in terms of sharing experience? The negative ending stories are very useful in the area of knowledge exchange and learning because these allow people to understand why things go wrong. BUT, when you want to use a story to get managerial buy-in, you need stories with happy endings to win people over.

Comment: In UNDP there were unsolicited testimonials used to share experiences that were mostly successful. A knowledge fair was also organised as part of a conference-type gathering to boost people's confidence about how well various initiatives are going, illustrating the positive impact that knowledge work is having in the organisation.

Q: Who is the storyteller? Are there issues of status or style that make some stories more accessible than others?

A: It is not so much about knowing people who are listening but what the interaction of the storyteller with the group is so that people can believe the stories and find it credible because the environment is right. The same storyteller can find that some audiences are not receptive and cannot imagine the story in their own minds. When audiences start discussing the detail of the story without using the threads to make their own stories, the exercise is lost.

Storytelling is perhaps not a science and you try to do what works.

Q: CIDA mentioned the role of the external facilitator. Is this the model used in other organisations as well?

A: The World Bank has not made large use of outside consultants, although Arthur Anderson produced a useful report after a six week consultation; yet, they were seen as outsiders who did not know the dynamics of the World Bank. On the other hand, having people come in to give a talk and help get a conversation going has been extremely useful. Having people come in to provide an external review when management has requested their presence or their help has also proved useful.

When you have people from outside the organisation around for a long time, it becomes someone else's programme and there isn't a sense of organisational ownership.

Comment: UNDP endorses the point that someone who is familiar to the organisation and has been around for a long time can provide a supportive role and be sensitive to all the workings of the organisation. When people with long service can cut across boundaries easily, they are well accepted within the organisation and have legitimacy and the respect of the group.

Comment: The example of how Shell used stories of the future (through Scenario Planning) to help managers think through different scenarios has also been useful. This is a rapidly spreading practice which is being extensively used, not to predict the future, but to allow organisations to develop a comfort level and fluency with the dynamics of issues and to explore questions so that their response time becomes faster than anyone else's in the world. It was being immersed in possible futures that helped Shell deal with change more speedily and confidently.

Comment: In CIDA, someone coming in from outside will be listened to but must quickly build alliances within the organisation. Also, the way in which people have positively engaged with change has given management a confidence in the organisation's ability to direct its course.

Comment: On maintaining the institutional memory: Modern procedures for knowledge management are important, but we must also look at practical organisational practices to ensure that the basics are in place.

Comment: In Action Aid they have learnt that knowledge strategy must really relate to what you are trying to deliver in development work, in order for it to make sense and work. The organisation believes that people should be given space for reflection and has developed 3-year rolling plans. Instead of having Annual Reports they are having Annual Reflections which provide an opportunity for people to reflect on what they are trying to achieve and whether their actions are in keeping with these intentions. They are also saying that it is the responsibility of the region to submit a reflection of what is happening in their region through any means including stories, pictures, videos, or any creative means

of depicting their reflections. The burden is placed on management to make sense of these submissions and processes. This is an illustration of how knowledge strategies must relate to the processes and procedures that affect the development work in the field. The problem in this approach is that every donor expects Annual Reports and Reviews. So the question becomes how realistic is it to support countries to have these open processes so that they can benefit from the reflections more than the accountants can benefit from the metrics.

Comment: IADB has noticed that the official reports tended to be on the optimistic side and not to speak about the difficulties encountered in project execution. To counter this problem it is looking for personal reports from representatives to reflect what is going on. This method is working but there is a need for a myriad of instruments, such as video conferences, to make contact with people in remote areas and to establish links with some of the country officers. It has been found that feedback in such instances has been incredibly helpful.

Comment: Tearfund has learnt to share slide sets that are dynamic. This has proved a successful way of developing living communications within the organisation.

Comment: Getting leaders to support programmes is important, but how about getting buy-in from lower levels where knowledge management has to be implemented. Senior management could be totally committed to knowledge management, but if you have resistance at the level of implementation, this can be problematic.

Response: Denning agreed completely that if an idea does not resonate strongly with front line staff, it cannot be done simply with support from the top. Knowledge strategies need support from the top and the bottom; then, squeeze the middle, because you'll usually get resistance from middle management.

Q: How can incentives be designed to overcome personal resistance to knowledge sharing?

A: In the World Bank experience, in the short run, incentives do not work. If staff do not believe that new approaches will help them, they won't buy-in to processes. The incentives can establish an environment so that over time, even the incorrigibles will adopt new strategies. You have to inspire staff through a vision that is immediately attractive rather than think that incentives will generate support.

Resources:

Jean-Pierre Beguin's biography: see Appendix

Steve Denning's biography: see Appendix

Adrian Poplawski's biography: see Appendix

What is a chief knowledge officer? - Jean Pierre

Beguin, Steve Denning, Adrian Poplawski

In Louis de Merode's absence, the Panel responsible for the previous presentation addressed points raised by de Merode in considering this question. Comments and questions from the floor, and various inputs, including de Merode's questions and the responses elicited, are noted below.

Synopsis:

- A knowledge unit must be located within an organisation in such a way as to facilitate communication with a range of departments including IT, Human Resources and Evaluation, all of which contribute to the development and implementation of a knowledge strategy.
- If one individual should be assigned leadership responsibility for knowledge development, the title should reflect their facilitation and communication function.
- The most suitable leaders for knowledge sharing come from within an organisation, embodying tacit and explicit knowledge of organisational dynamics, structures, procedures and processes.
- A knowledge division should both develop policy and ensure that staff use, generate and communicate knowledge effectively.

Focal point, fully dedicated leader, small staff

Denning: There should be a focal point for such activity within the organisation. The term Chief Knowledge Officer (CKO) is an unpleasant one which has hierarchical connotations. It conjures notions of someone exercising power over the organisation, completely counter to knowledge sharing. The person should influence by what they do rather than by their title.

Beguin: Location should be decided within each organisation in accordance with its needs and dynamics. The term 'Chief Knowledge Officer' is perhaps problematic, and the position within an organisation depends on the nature and size of the organisation. While a focal point is needed, the position must be participatory and integrated into the organisation. Care must be taken with what the person or group would do and how they would relate to the rest of the institution. You cannot give the perception of creating an expert group, but one designed and implemented in ways that keep it in sync with the rest of the organisation.

Poplawski: CIDA found the need to identify what it needed to do. The Chief Knowledge Management Advisor is responsible for policy development while the organisational responsibility for support and implementation resides in another organisational branch. There is a lot of pressure from within the organisation for answers to come from the knowledge management section. There has to be a very strong connection between the technological enabling and the knowledge management sections. The latter cannot afford to be isolated in the organisation. It is difficult to find this interface but these units must work together. Also, the knowledge management division must be connected to other strategies such as the human resource development strategy in the organisation so that knowledge management is integrated in the organisation.

Where do you locate such a focal point? (IT, Human Resources, independently or in the front-line operations)

Denning: The World Bank asked Larry Prusak where to locate our unit and on the basis of a poll, he indicated that about 1/3 of organisations put it in IT, 1/3 in finance or strategy, and 1/3 in budget. He thinks that the function should be seen as part of the operations of management but this depends on the politics of the organisation. Organisations need to be flexible and opportunistic to take advantage of what is possible.

Comment: Action Aid struggled with appointing a knowledge sharing person. The idea exists of having a knowledge sharing and knowledge project manager, but the organisation is stuck on finding a suitable person who can lead and develop strategy. People are either far too expensive or speak a completely different language to that of the organisation. For Action Aid, location is not about placing the function in the northern office but to recruit someone from one of the regions.

The advice given is: look again inside the organisation and find someone with organisational credibility who can learn about knowledge sharing. Since the discipline is only two or three years old, it is not a field in which there are people with many decades of experience. It takes a lot longer to learn the organisation than to learn the subject field.

Comment: In UNDP the kind of knowledge being spoken about has meant that there has been a logical choice of person who has an understanding of the organisation on as many levels as possible. The logical fit at present is at a policy level, but may be moved to operations.

Q: How can we integrate a formal knowledge capturing structure such as an evaluation department into a new way of doing things?

Denning: The World Bank evaluation departments were not early enthusiasts for KM but the organisation is presently using the knowledge groups or communities of practice to bring in the evaluation angle, so that they weave the knowledge silos together in the same way that they wove the business units together. In this way, the education, research and evaluation staff are brought together from across the organisation into these thematic groups in which they are exchanging knowledge and informing practice.

Comment: A different model is found in Children Fund which has no dedicated resources for knowledge management, but has distributed this function throughout the organisation. The International Director has been the key person responsible for knowledge management overall. They have divided their knowledge management approaches into key initiatives (yellow pages, etc.) for which there is a coordinator and a sponsor.

Comment: The Evaluation unit at the DGIS has found that aiming for shorter cycles of evaluation is more realistic because circumstances and projects change. They are strengthening local capacity so that knowledge strategies are being developed locally, thus strengthening developing country agendas. This means that the evaluation department may be a logical place for locating a knowledge management unit or person.

Denning: Historically, in the World Bank, evaluation departments have had these dual roles of helpful reflection and wielding a whip to ensure accountability, or judging rather than facilitating. When you try to perform both functions, the judge function tends to dominate and gets in the way of facilitation. Presently the evaluation department is moving towards facilitation which positions them as a likely home for the knowledge management function.

Beguin: If knowledge management doesn't work in the evaluation area, it will not work anywhere in the organisation because the distribution of results from this area is crucial. The focal point should be in the operational area of the organisation because you can then have maximum impact on the organisation as a whole. Very close contact should be maintained between the focal point and IT.

Comment: Another possible location for the knowledge management function is the training office, which is the Learning Resources Centre in UNDP's case. UNDP's SURF initiative works very closely with the Learning Resources Centre giving their initiative a strong human resource flavour.

Comment: In GTZ, it is found that the link with evaluation departments also leads to policy development. Wherever you locate a knowledge unit, you must be perceived as neutral and not part of someone's agenda. GTZ constructs their unit so that they have a small department with little power so that there is no idea of someone taking care of the entire organisation's knowledge. This ensures that people shoulder some responsibility for their own knowledge creation and management. It is a challenge to weave all these silos together so that the knowledge initiatives don't fall between the cracks.

Comment: In CIDA we have realised that we are thinking in an old fashioned way when we think of creating a new box in addressing the knowledge management issue. You must think about what you want to put in the box and how to connect the different divisions within the organisation. You must find new ways of doing this particularly since the concern is knowledge sharing.

Comment: There is an intrinsic relationship between knowledge management and evaluation. At IFAD, we are trying to provide feedback and results that are relevant and on the ball rather than out of date. We have learnt to extract all lessons learnt from different projects and make these available via our Web site. What we would like to know is, what are the core competencies of a CKO, and whether this is a dictatorial function or if the CKO could facilitate development of knowledge thinking and knowledge strategies?

Denning: On competencies of the knowledge officer: An impossible set of characteristics is being laid out for a knowledge officer. A person who does their best to take advantage of the opportunities presented by the organisation for change is a good choice. Articulation of tasks through a focal point rather than an individual is being proposed. Persons who can influence flux in positive directions are those being sought by organisations.

Poplawski: In CIDA there is an informal knowledge management group which shares information on knowledge. CIDA has adopted the title of Chief Knowledge Advisor rather than officer because emphasis is placed on the idea of sharing. The problem of being too closely associated with evaluation is the close relation with audits, rather than with learning.

Resources:

Jean-Pierre Beguin's biography: see Appendix

Steve Denning's biography: see Appendix

Adrian Poplawski's biography: see Appendix

Earl, Michael & Scott, Ian (1999) What is a Chief Knowledge Officer. In: Sloan Management Review, Winter 1999.

Supporting organisational learning: knowledge, competence, and performance management - Pentti Sydanmaanlakka

"There are no limits to building better organisations, societies and a better world and I believe that that is our common task" – Pentti Sydanmaanlakka

Pentti Sydanmaanlakka is the Director of Human Resources for the Broadband Systems Division at Nokia (currently on sabbatical leave). He proposes that we should understand the basics behind knowledge management so that we can apply these in practice. Understanding organisational learning and determining how to support it is key to organisational development. Organisational culture and values are very important in understanding how to support knowledge sharing. He proposes support through three processes: knowledge management, competence management and performance management.

Synopsis:

- Knowledge management is a combination of people, processes, technologies and culture.
- It is through learning that organisations are able to improve what they do. Appropriate knowledge sharing facilitates effective learning.
- Various management approaches can be used in combination to produce a learning organisation which can provide improved service. These include Performance, Competence and Knowledge Management.
- Organisational values must be reflected in the day-to-day running of an organisation in order to impact on its knowledge strategy.
- The Nokia Way promotes a culture of learning and is premised on four pillars: customer satisfaction, respect for the individual, achievement and continuous learning.
- The Nokia Way is facilitated through a series of mechanisms, mainly interactions between managers, colleagues and employees placing power in the hands of the individual to develop in the organisation.
- The jazz band analogy captures Nokia's approach to knowledge management: the company shares a common vision and creates the space for an ensemble to perform in unison without controlling the music or straight-jacketing the performance.

Sydanmaanlakka believes that although knowledge management is very popular at present, it is not widely implemented in organisations. Change and people management make up 80% of knowledge management, while IT constitutes only 20% of it.

In Nokia, no one person owns the knowledge management process. Instead, everyone owns it. Human Resources has a crucial role to play in implementing knowledge management, as do the IT, quality and corporate planning departments.

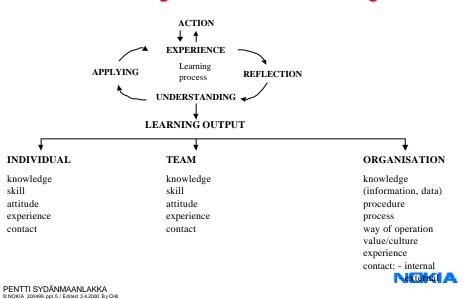
Organisational learning is pivotal to knowledge management

Organisational learning finds the overlap of the three management approaches. Performance management has an individual focus, while competence management deals with organisational vision and strategy with a company focus. Knowledge management seeks to tap into the company experiences leading to a thematic or team focus. Nokia is seeking to integrate these three approaches so that through implementation of knowledge management, the company uncovers the knowledge practices already underway in the organisation.

Sydanmaanlakka comments that all organisations are learning organisations but the goal is to learn better and faster. In his view:

Organisational learning describes certain types of activities or processes that may occur at individual, team or organisational levels.

W hat is Organisational L earning?



Because organisations don't always make time for reflection and understanding they are not always able to understand what happens in the organisation or how to improve their operations. In the organisational learning model, knowledge becomes only one of the core competencies required for effective performance. Skills, attitude, experience and contact are of equal importance at individual and team levels and culture is significant in supporting certain learning approaches over and above others.

Learning processes should be analysed in efforts to foster better learning. The transfer of knowledge is important to organisational learning because it allows for sharing of experience, know-how and method across the organisation.

In **Performance Management** Nokia is focussing more on development and reviewing, or coaching. Planning and development discussions are the tool used to measure performance. These meetings occur at least twice a year between staff and employees to relay what employees have learnt and how this maps against their own goals.

In **Competence Management** the overall goal is continuous improvement of competencies with a view to improving performance. The approach includes company, individual and environmental perspectives. The core competencies required to meet the strategic objectives of the organisation are analysed by competence centres that identify appropriate development plans in accordance with needs and deficits. Knowledge is seen as one of the core competencies in an organisation.

In **Knowledge Management**, the ultimate goal is the continuous application of new knowledge to improve competencies so that performance can be improved. Organisations need a knowledge management framework including human resource support, IT tools and environmental culture which facilitates learning opportunities. Sub-processes include creating, capturing, storing, sharing and applying knowledge. Organisational culture incorporating organisational values, style of leadership and communication must lend itself to knowledge management.

A number of organisations have Performance Management and Competence Management systems in place, but many may not have Knowledge Management strategies in place. Nokia has found that when implementing a knowledge management system, other aspects of the management system ought to be considered to see how the knowledge strategy relates to these. This helps avoid repetition and duplication of innovations and applications.

Nokia culture

It seems that in some organisations, there is still a concern that sharing all its knowledge means giving all its power away and organisations may not want to make all they know accessible. In Nokia there is an effort to change the company culture to foster a belief that knowledge sharing is a good thing which will not lead to redundancy. The question remains: "To what extent should organisations share their knowledge"? Perhaps companies are keen to share knowledge only in-house, and to retain privacy in certain areas of knowledge creation.

In terms of Nokia culture, the organisation has tried to support knowledge management activities. It's a flat, networked, global and multi-cultural organisation. Speed, flexibility, opportunity and openness are important features of the organisation. The company is also value-based with customer satisfaction, respect for the individual, achievement and continuous learning as four areas of priority. Nokia tries to implement these priorities in practice so that people are aware of making these living values. Nokia management have developed 'The Nokia Way' to assess how employees and managers are performing in relation to these values. They are also looking at how the employee and manager are supporting knowledge management, and its sub-processes in practise: creating, sharing, re-using, etc. They have looked at incentive-based systems, but it is believed that knowledge sharing should be a part of the company culture and not something which is specially rewarded with money.

Nokia is also trying to transfer tacit knowledge to explicit knowledge and individual knowledge to organisationally explicit knowledge. The intention is to capture as much organisational knowledge as possible. The company is working on how to deal with value judgements, feelings and beliefs, as well as ways of interacting, reasoning and communicating. In addition, it is dealing with sources of individual autonomy at the level of

expectations, cognitive modes, problem solving modes, and concepts of self to integrate these into the organisation. The company is interested in managing these areas so that the Nokia Way brings the whole individual into the organisation.

The jazz band analogy

In developing the Nokia Way in practice, the jazz band analogy is helpful in expressing the level of interaction within the organisation as well as the many different inputs and teams which work together as a jazz band. The players share a common vision and are interested in producing good products through innovation and improvisation. It is not always clear what the end result will be, but because there is a common vision guiding their performance, these professionals allow their services to be shaped by the feelings and interactions of the various players who are part of the company.

Discussion

Q: You talk about using values to promote change; can you talk a bit more about how you promote change in your corporate culture?

A: We have a book called *Nokia Saga* which is a novel about Nokia history – about 100 stories which many employees read helping them to understand the history of the company and what its values are. The storytelling provides examples of what managers do and their application of Nokia values. The managers are very eager to promote the company values, and they have brought these into the development and planning discussions by making something like 'respect for the individual', which is an abstract notion, more concrete in personal one-on-one discussions.

Q: If you listen to a jazz band, it seems natural, but someone has selected the musicians. There must be some art in selecting the individuals for a team so that you really get an ensemble that can play together. What is your approach to selecting those teams?

A: We hope that our new employees will share our basic values, one of which is 'respect for the individual'. We don't want clones, but different individuals and employees who can work together and make an ensemble. We want different backgrounds and personalities that share basic values such as continuous learning. We look at whether our potential employees are prepared to live in constant change and learn continuously.

Q: You referred to the dilemma of keeping and sharing knowledge within or outside of the company.

A: Within Nokia, we do lots of teamwork to promote teams in a co-operative, sharing culture. Most times, these teams take decisions. If people cannot work in teams, they are not desirable to the organisation because Nokia's work is very team-orientated.

Outside of Nokia though, often when you are sharing knowledge with others, you get such good feedback that you can often massage and develop your own ideas further. In this way, sharing is most beneficial to the organisation. Even with competitors, it is good to share your knowledge, for instance, regarding staffing.

Q: How do you change culture from one of 'information is power' to one of knowledge sharing?

A: You have to build and develop your own knowledge management tools so that they fit your culture. You must understand that it is not easy to change your culture. You have to change your culture step by step rather than rapidly.

Q: You mentioned that reflection is important. How do you promote this idea?

A: This is very difficult as there are so many things to do. The danger is that we are repeating our mistakes without reflection. If someone can see that others are taking time out to reflect through e.g. sabbatical leave, they will also start doing so. It is a big paradox though, taking time for reflection, but also performing well at the same time.

Q: Has organisational learning and knowledge management led Nokia to redefining its business strategy in terms of priority areas, products, services and activities? Also, do you have a Chief Knowledge Officer?

A: We do not have a Chief Knowledge Officer. We have a steering group of about ten persons from different functions co-ordinating our activities. The head of the steering group is head of a quality department.

Q: Is it encouraged to have sabbaticals or do you have to fight for these?

A: It is hard to win this battle, but I believe that these will be quite popular in the future because people believe that they cannot update their competencies while they are working. I don't know what position I will go back into but I believe that I have something to offer when I return to Nokia.

Q: We've heard that the World Bank has relied on communities of practice to further their knowledge sharing, UNDP uses the Surf model as key to their strategy, some people use codification to further their knowledge. What does Nokia do mainly in support of its knowledge sharing process?

A: We are using all these tools to promote a knowledge culture. Sometimes we use different terms, but we look at what other companies are doing and we use what we think will work in our organisation. Our way of working is not highly structured. Because speed is so important and relevant to us, we are constantly changing and we don't work according to designing big structures. As we work, we implement. We now use six monthly budgeting cycles, for instance, because we don't know what our world will look like in twelve months time.

Q: Different cultures is an issue for all global companies. It is easier for certain cultures to adapt to change than others. How do you deal with 55,000 people spread all over the world? Do you impose the Nokia Way on them or do you adapt the Nokia Way to different cultures?

A: We are trying to adapt the Nokia Way to different cultures. We try to collect good features of different cultures and put them together. Nokia culture is not a Finnish or Scandanavian culture any longer, it is really a global culture which is constantly developing.

Nokia's Annual Report called "No Limits" tells about the company culture and promotes the idea that there are no limits to the possibilities for the company or anyone else - to knowledge sharing, to learning, to participation, and to building better futures.

Resources:

Pentti Sydanmaanlakka's biography: see Appendix

Garvin, David (1993) Building a Learning Organisation. In Harvard Business Review, July-August 1993.

Senge, Peter M. The dance of change : the challenges of sustaining momentum in learning organizations. London: Nicholas Brealey, 1999

Wah, Louisa (1999) Making knowledge stick. In: Management Review, May 1999

Case example on affecting culture to support knowledge management - Gisela Wasmouth

Gisela Wasmouth is Head of the Unit of Organisational Learning at the Swedish International Development Cooperation Agency (SIDA). SIDA is a medium-sized organisation with a staff of about 700, 600 of whom work in the Head Office in Sweden. Wasmouth's current position concerns the transformation of SIDA into a learning organisation. Her tasks include policy development, strategic planning and implementation. She proposes that changing the culture in an organisation is a massive task affecting people at all levels.

Synopsis:

- Knowledge management can be developed through cultivating a learning organisation.
- Effective management is key to attracting and retaining good staff.
- Organisations have to balance different needs of their staff through effective management, evaluation and dynamic learning.
- Integrating evaluation strategies at the levels of staff, management, departments, and the organisation as a whole leads to effective organisational progress.

SIDA's transformation work started in 1996, in response to a demand to keep the organisation professional and competent. The Organisational Learning Unit started producing policies and identifying tools that aid their work. They were faced with two realisations, both of which encompass the idea that their work is people-centred:

- These are times of constant change and organisations need methods and knowledge to deal with this reality;
- Attracting and keeping competent people in organisations is a challenge. SIDA realised that it could not consider a knowledge management strategy without addressing the need to attract young people and deal with the loss of organisational memory. SIDA found that young people want constant challenges and while they don't want to be managers, they do want to be seen and heard. Alongside this, the organisation encountered the difficulty of dealing with older people who are not keen on change.

SIDA believes that you cannot change a system without changing the whole organisation and has adopted a broad approach to knowledge management. Managers have tried to define what it means to be a **competent organisation** and have identified the following as necessary staff skills:

- learning skills being able to absorb knowledge, translate it into practical action and adapt it to new contexts;
- relationship and communication skills being able to work in teams and in partnership;
- functional skills being able to implement what you have and to adapt it to different situations and conditions; and.

professional, strategic and operational skills are seen as the most important to develop a learning environment.

In an effort to reach staff who are generally highly educated but drowning in information, SIDA has successfully used key images to communicate core organisational concepts.

Developing competent managers

The organisation noticed that many young people were leaving the organisation and found that the prevailing conditions were not allowing them to feel sufficiently challenged. Middle and senior management were doing the organisational travelling and taking all the benefits of the situation.

It seemed that managers were vitally important in the organisation to ensure that people were performing to the best of their capacity and realising their potential. Recent investigations have shown that good leadership, participation in decision making and secure environments helped people perform better.

In response to this discovery, SIDA decided to work on good management policy. The work that they have done has had top level endorsement.

SIDA's Management Policy stresses that managers must have a holistic view and create the conditions for their staff to work most effectively and efficiently.

Managers need to be:

- Good communicators; able to share and encourage facilitation of goals and ambitions.
- Coaches; implies an ability to encourage and guide staff in their work.
- Creators of learning opportunities; so that staff can use their work to improve their knowledge.
- Decision-makers; ensuring an ability to lead and direct projects and people.
- Explorers; of the environment, to know what opportunities exist.
- Agents of change; able to provide a secure space in which staff feel comfortable about doing their work differently.

SIDA has an extensive training programme for managers based on the organisation's management requirements. It is a four-day programme, which all managers have to follow, as they are evaluated according to these competencies. The evaluation takes the form of a questionnaire to staff, which they complete according to each manager's performance in relation to the specific competencies. The results are fed back to managers so that they are able to make any necessary changes.

In taking on some of the goals and features of a Transformational Leadership Programme from the Sydney Business School, SIDA has encouraged participation and innovation. They found that where they have a high degree of transformational leadership, there is a climate of innovation. This has convinced SIDA of the success of their approach to effective management.

Developing competent staff

SIDA's staff policy complements its management policy. The organisation has placed the responsibility for staff development with the staff themselves. The responsibility for productivity and progress is thus shared throughout the organisation and is premised on the belief that it is the people and their contributions that make up the organisation.

Staff are expected to be:

- Producers, and to do their work accurately;
- Members of teams, so that they share knowledge;
- Developers, who are concerned with their own development;
- Communicators, who are able to communicate within the organisation as a whole; and.
- Bearers of values, who uphold SIDA's vision and organisational values.

The staff policy is used to assess and evaluate staff. Managers and staff reach agreement on the areas that require attention concerning themselves, both with the individual's development and that of the organisation.

Developing the organisation as a whole

- SIDA has used various strategies to develop knowledge management by promoting learning in the organisation.
- A mentoring programme is spread throughout the organisation so that both managers and staff members participate. Mentors are chosen from outside of SIDA which brings new influences into the organisation. The mentors and their adepts meet three times a year with organisational facilitation.
- Departments as a whole also undertake a 'gap' analysis so that they identify what they need to do to improve the organisation as a whole and their department in particular. This includes management and staff evaluations so that these feed into the gap analysis process.
- SIDA has identified a level beyond the information and knowledge level, that of 'understanding' which comes before wisdom. They regard understanding as one of the organisational pillars and believe that staff should be evaluated for their levels of understanding of matters pertinent to their positions. In this way, they develop profiles for people in the organisation to identify where they need more or less input.
- SIDA's Human Resource Report deals with learning activities in different departments. Managers take the role of creating learning opportunities very seriously and most work is project-based to foster team learning. Training is aimed to ensure that people have all the skills that the organisation requires to make for a working environment that promotes knowledge sharing.

SIDA is developing a system of learning to share knowledge within the organisation without actually using the concept of knowledge. Wasmouth stated that its various learning initiatives and management methods constitute a knowledge strategy.

Discussion

Q: This morning we said that organisations have top and middle management who are very important because they have real power. How did you get their buy-in?

A: In order to be a good manager at SIDA, you have to comply with our policies. Also our Director General supports our initiatives.

Resources:

Gisela Wasmouth's biography: see Appendix

Building knowledge management networks: going over the territory - Geoff Barnard

Geoff Barnard is Head of Information at the Institute of Development Studies (IDS), University of Sussex. His presentation provided a mixture of analysis, comment, and reflection on the various contributions to the workshop.

Synopsis:

- A variety of audiences should be considered in the creation of knowledge systems.
- To overcome duplication, organisations should be aware of other players in their field or in related fields.
- Knowledge systems must be designed with a view to networking with other systems.
- A number of small networks that agree on common standards will facilitate knowledge sharing.

Barnard spoke about IDS's experiences, focusing on various issues pertaining to the creation of knowledge systems. He identified different audiences to be considered in the development of a knowledge management strategy:

- Internal audiences which need to speak to each other and the outside world;
- Organisational working partners who are in-country; and,
- External audiences who are of relevance to an organisation's work.

He explained that it is important to consider how to relate to these various audiences and what the implications are for a strategy. Among the implications are whether to create open or closed systems and how to control and manage these for maximum benefit. The advantage of a narrow audience is that the system can be more easily controlled, but it does tend to be exclusive. A broader audience allows reach to a more targeted, powerful group with greater impact on, and benefits to, the system.

In speaking about the duplication problem, Barnard provided the concept of seeing the upsurge of organisations as part of a solar system with communities of practice clustering around a common knowledge focus, the sun. He spoke about how knowledge management systems may evolve quite organically to take shape and form according to need and its drivers. He said that many organisations are duplicating knowledge to a significant extent and proposed that this is already becoming quite problematic. Still more dramatic is looking outside a particular solar system to find that the sky is full of different communities of practice, many of which may well deal with the same issues. The duplication dilemma is further compounded by the predominance of knowledge growth in the north or in funder organisations, inaccessible to the South which does not have the facilities to build its own knowledge galaxies.

Barnard posed IDS's three possible solutions to this dilemma:

Model A: Choosing an independent organisation into which resources are contributed, with a number of agencies drawing upon this pool.

- Model B: Using an existing knowledge entity as a support structure for an organisation's work. Connections can be created between different systems with knowledge used from, and fed to, systems. This results in a two-way knowledge flow.
- Model C: Leadership comes from one agency but connects to a couple of other likeminded agencies all of whom benefit from the knowledge exchanged between them. Different, potentially competing views are exchanged.

These are 3 possible ways of accumulating knowledge in ways that are logical.

The knowledge pooling idea has some advantages but also some requirements:

Advantages	Requirements
Economies of scale	Agreed focus among contributing
Critical mass	agencies Agreed data standards
Better knowledge sharing between agencies	Agreed data standards
More accessible to outside audiences "Independence"	Realistic planning (and funding) horizons

Conclusions

Barnard suggested that there is considerable scope for the idea of pooling knowledge, but this will not be a solution for everything. He said that there needs to be different ideas for different niches because one solution will not fit everyone's needs. It makes sense for organisations to be realistic about their knowledge management strategies and to start small and build on these initiatives. Finally, he proposed that knowledge management systems and strategies should not be IT driven, and should instead be needs driven, to ensure that users are guaranteed service and benefits.

Resources:

Geoff Barnard's biography: see Appendix

Fostering knowledge management in the international community

Fostering knowledge management in the International Development Community – Plenary facilitated by Lyle Makosky

The final session of the workshop addressed the following questions:

- 1) What lessons have you learned here so far about applying knowledge management in your organisation? In light of this, what do you see as the next steps to continue to deepen the learning and exchange among development organisations about organisational knowledge management?
- 2) How should we consider involvement of knowledge management in the South?
 - Do we expand awareness and understanding of (a relevant approach to) knowledge management in the South as a learning initiative?
 - Do we consider how knowledge affects our work with the South, e.g. do we start to rethink the way we work with the South in the light of knowledge management as a 'different way of doing business'?
 - Who do we mean by the South in these initiatives?
- 3) What is the priority across these two areas above and why?

Discussion

Contributions from the participants are captured by way of comments that fed into the final recommendations as outlined below.

Comment: Organisations are at different stages of their knowledge management development. It would be good to have some kind of follow-up so that people can compare how well their organisations have progressed. Involving participants from both the Washington and Brighton workshops in a session of reflection would allow us to exchange ideas and see how significantly we have moved forward.

Comment: It would also be useful to look at the possibility of creating contact between communities of practice across organisations. If the communities of practice could be electronically indexed producing yellow pages, organisations could see which communities exist in other organisations along the same lines as theirs.

Comment: We cannot continue this split between north and South especially since much of our knowledge in development organisations comes from the South. It seems inappropriate to make a distinction between the north and the South in ways that suggest we should be having two different conferences for the north and South.

Comment: As a community of development organisations, what brings us together is the particular roles which we have to play. Development agencies can identify niches of collaboration which enhances our work. This is distinct from development in the South in

which work is more discipline oriented along lines such as micro-finance or gender. We should promote this by including the South in this conversation on the basis of their specialisation.

Comment: We expect to have continuing dialogue on our knowledge management strategies within our organisations, but we need to make clearer our understanding of how the South, and our relationships with the South, fits into this.

Comment: There are two parts to this issue. We should continue to dialogue with this group, but we also need to make contact with the South. We don't have enough information yet about whom we need to bring to the table and talk to from the South. There is plenty of knowledge and skill in the South that we need to tap into. It is possible that they may be able to help us with direction and solutions.

There are some specific things that could be done in option one, but in addition we cannot put the South problem to the side. We must build up our knowledge a bit more about this and then focus on the third session.

Facilitator:

There are two complementary options to find out more about what is going on in the South so that we can contemplate a next step that is focussed on learning more about knowledge management.

One idea is a third session in 'x' months to continue the debate on knowledge management and to pick up our understanding of the South. This would include both dimensions of advancing understanding of knowledge management, but including the question of the South in these discussions. How do people feel about this?

Comment: There are certain things that this group can do, such as what we have been doing in this meeting, but the issue of the South and how we address the needs of the poor and disadvantaged is something we need to deal with in our own organisations. I don't think that this group is suited to addressing this task. Knowledge for development will not be relevant unless we are clear about who we are working for and with in the South. We must be confident that the content of our work reflects the interests and has the participation of the groups in the South with which we work. It is not sufficient to say that if we get reports from the South, we are involving the South in our discussions.

Facilitator:

Should the third session proceed with this dual focus and if there is a dimension dealing with the South, consideration of whom our partners in the South are, and how they wish to influence an agenda and participate in a forum would be crucial.

Comment: Knowledge is contextual and resides in networks and interactions. We should not be able to think of knowledge as separate from the South as our knowledge is intrinsically tied to their contexts. We cannot think of having knowledge that we can give to anyone. The South informs our knowledge and their involvement in conferences is therefore paramount.

Comment: I don't know if a dual-purpose conference would work because we would have such different starting points and contexts and needs.

Point of clarification from Bellanet:

The question being asked of you is whether you are prepared to go back to your organisations to draw more people into these discussions.

Comment: If we are talking about a third session, we have to talk about what is going to happen in between these meetings and we have to consider virtual encounters using electronic communication to facilitate sharing.

Comment: CIDA is prepared to open its site for people involved in knowledge sharing to continue sharing their experiences. Initially the idea for the site was to share information on our knowledge management initiatives within our own organisations. Others are welcome to join in and to make suggestions about how they wish to change the focus of the site.

Comment: If this is the beginning of a community of practice, we should apply what we have learnt in the last few days. There are also certain implications such as the need for regular face-to-face meetings. The sites of both CIDA and Bellanet are being offered. We should decide to use either of these but not both.

Comment: UNDP would be interested in developing a discussion paper on communities of practice that exist in the donor community. Ideas and experiences that come out of this exchange would contribute well to such an exercise.

Comment: Since we have two sites available, it may be useful to use CIDA for developing the knowledge management ideas and Bellanet for taking forward the debate about the South.

Comment: If we invited a few of the partners from the South in a small conference in the South, we could identify their thoughts on this process. It would then be possible to shape a third session based on this experience.

Comment: Bellanet is already involved in exploring linkages with the South and the development of appropriate resources that are accessible and less expensive ways of exploring knowledge in the South.

Comment: The World Bank is committed to continuing with both of these tracks. Our various bilateral discussions on knowledge management have been useful. In terms of addressing the South, we are interested in nurturing communities of practice as part of our plan. We could report on the progress of developing these plans. We believe that knowledge is an essential driver of the economy and we're keen to find ways of enhancing this notion in our work with the South. The various global gatherings such as the ECOSOC meeting are important opportunities to take forward this debate because initiatives outside of these events will have to be funded.

Should we encourage communities of practice around these issues, they will only take off if there are champions to drive these processes. We must be cautious in what we undertake. Things will only happen if there are champions and leaders and if there is energy and passion around certain issues. Before we take on these grand ideas of 2 sites, CIDA and Bellanet should hopefully reduce this idea to 1 or 0 sites.

Comment: It would be good to look at some kind of connections to be made between communities of practice to investigate the possibility of working across existing boundaries. It could make a lot of sense if the communities of practice could be electronically indexed so that Yellow Pages could be developed on them. This would help identify who else has a community of practice on the same theme so that these could be accessed.

Comment: In terms of co-ordination organisations could exchange information on operational matters such as projects in countries. IDML provides an opportunity for standardising these exchanges. We could join the IDML list to discuss articulation of

different approaches and ways of standardising processes and products. On the Website there are explanations of what IDML and XML are. This is public domain information.

Recommendations

There appears to be consensus for pursuing both the learning about knowledge management and the involvement in the South track.

Learning about knowledge management

Common interests	Action
Indexing existing communities of practice prevalent across	Bellanet will scope this
international development organisations to produce yellow	area in the initial
pages.	phases.
Pursuing the linking of communities of practice	This is a longer term process
Dedicating a site to learning about knowledge management.	Bellanet and CIDA will identify best way forward.
Surveying and exchanging progress among the organisations regarding their progress in knowledge management.	Bellanet
Considering the question of whether a 3 rd session and the appropriate focus of such a session x months down the road.	Bellanet
Report on the Brighton workshop with PowerPoint presentations attached.	Bellanet
Extracted, highlighted version of the Brighton Report to communicate to stakeholder groups interested in pursuing knowledge management issues.	Bellanet

Bellanet noted that they would be reluctant to have a third session without a clear agenda and sense of purpose. Bellanet will peruse the outcomes of the two workshops and conduct a survey as outlined above to pursue the question of whether a third session makes sense and if so, what the topic of discussion would be.

Involvement of the South in knowledge management

Common interests	Actions
Framework paper on donor agencies as a community of	Action: UNDP
practice.	
Engaging the South theme	It is still unclear what form this will take. This question may be considered in the "Learning about knowledge management" site.
Using ECOSOC and other similar global forums for further exchange on this area.	

A specific event involving the South will only be pursued after the framework paper is produced and further discussion is held. In the meanwhile, organisations will continue with their own actions in terms of engaging the South. These will ideally be brought to the 'Learning' site through Bellanet's survey and monitoring of progress.

Closing

stages of the workshop.

The sponsors expressed their thanks to the hosts, the facilitator and the participants for a productive session which met the needs of the workshop.

Bellanet thanked IDS for the smooth running of the workshop.

The facilitator expressed thanks to Bellanet for their efforts particularly in the pre-planning

Appendices

Appendix One: Agenda

Monday, June 26 – Theme: Purpose and Strategy

9:00-9:15	Welcome – Welcome, comments from	Sponsors
J.00-J.15	sponsors	Оронзога
9:15-9:30	Överview	Facilitator
	 Conference objectives, program 	
	 Survey results on KM readiness, 	
	needs/priorities - Working definitions, concepts	
9:30-10:30	Key note: The Development of Knowledge	Charles Savage,
0.00 10.00	Management and why it is important	Knowledge Era
	 History, current trends, key ideas, models, 	Enterprises
	what we've learned	(Presentation
	– Q/A	plus interactive
		session with participants)
10:30	Break	participants)
10:45-12:00	Knowledge Management case experience	Steve Denning,
10.45-12.00	in the World Bank	World Bank
	 Importance of Knowledge Management to 	
	the international community	
	 Drivers, challenges faced by World Bank, 	
42.00 4.00	options attempted, overall approach	
12:00-1:00	Lunch	
1:00-2:30	Defining purpose and strategy	
	a) Overview of purpose and strategy definition	Facilitator
	 Range of strategic positioning 	
	options/models (viz., business lines; value	
	proposition; Knowledge Management as part of organizational learning, etc.)	
(60 min.)	b) Case study on defining purpose and	Nick Milton,
(00)	strategy – The British Petroleum KM story: how	Knowledge
	they defined a KM strategy in response to their	Transformation
	knowledge needs.	International
	- How the BP lessons are being applied and	(former BP), and
	adapted at Tearfund to create a responsive. learning organization and a KM strategy to fit	Paul Wiffen, Tearfund (former
	the special conditions of Tearfund.	BP)
	the openial conditions of Feathand.	(joint
		presentation)
(25 min.)	c) Table group discussion – Key	,
	messages/principles re purpose and strategy	
2:40	 Lessons learned 	
2.40 Break	ζ	

3:00-5:00	Knowledge resource mapping a) Overview of types of mapping models (viz., Business Line Process/Knowledge Asset	Facilitator
(30 min.) (30 min)	Mapping; other models) b) Case studies on knowledge resource mapping – using business lines/knowledge asset model	Chris Smart, IDRC
(30 min.)	using an external consultantc) Open plenary exchange – other	Peter Kibby, TFPL (CGIAR) Participant
, ,	experiences, suggestions for identifying knowledge resources in participant organizations – lessons learned on the day	experience based suggestions
5:00	Planning Committee check-in	
Tuesday, Ju	ne 27 – Theme: Accessing Knowledge	
9:00-9:15	Accessing knowledge - Introduction – overview of two core approaches (codify/collect and person-to-person/connect)	Facilitator
9:15-11:20 (40 min.)	Communities of Practice a) Introduction to CoPs – outline of different models, techniques, pros and cons – general guidelines, do's/dont's	Louis De Merode, Silver Creek Ass.
(40 min.)	 b) <u>Case study on COPs</u> – particular approach in a development organization methods, rationale, challenges faced and addressed, lessons 	Steve Glovinsky, UNDP (SURF network)
10:35-10:50	Break	
(30 min.)	c) Table discussions – charting of lessons Knowledge collection/codification approaches	
(25 min)	 a) Case study – knowledge asset picture, Knowledge Management strategy drivers, codification approach and rationale, lessons learned 	Adrian Blundell, DFID
(25 min.)	Table discussions	
12:15	Lunch	
1:15-1:45	 b) Table group discussion – observations on best conditions/needs for a codify strategy – lessons learned Access Enablers a) Overview of key enablers that support access – introduce range of enablers, specify technology and facilitation for examination 	
1:50-3:00 (30 min.)	b) Technology as enablerb) (i) Overview of range of possible technologies	Peter Kibby,

(40 min.) 3:00 Break		TFPL Peter Armstrong, OneWorld.net	
Di cuit			
3:30-4:30	c) Facilitation as enabler – overview of facilitation principles, methodologies, lessons learned	Steve Song Bellanet	
4:30-5:00	d) Other enablers - Other experiences with enablers, i.e., "What was the mix of supporting mechanisms or approaches that enabled 'access to knowledge to flourish in your	Manfred Haebig, GTZ	
Post 5:00	organization" Preliminary views on next steps for KM in the development community Participants explore KM needs and potential next steps in the development community	Participants meet informally in groups for 45 min to discuss the future.	
6:00	Reception with refreshments		
Wednesday, June 28 – Theme: Leadership and Culture Facilitator			
9:00-9:15	Overview on day and main theme		
9:15-11:00 9:15-10:15	Fostering leadership of and for Knowledge Management a) Getting Leadership and Organizational buy-in – approaches and experience to get the leader and executive team onside – Creating awareness and understanding of knowledge management in the organisation – Identifying and fostering incentives – Defining the need in compelling and relevant terms	Panel discussion Adrian Poplaws CIDA Steve Denning, World Bank Jean Pierre Be IADB	
10:15 10:30-11:00 11:00-2:00	Break c) "What is a Chief Knowledge Officer"? — guidance on stewardship of Knowledge Managemer in an organization — the roles and approaches of the CKO or equivalent Creating a Supportive Culture for Knowledge	Panel discussiont (cont'd)	
11:00-12:15	Management a) Supporting Organizational Learning through Knowledge Management, Competence Management and Performance Management - How knowledge management contributes to organizational learning - How knowledge management and performance management link to the organization's strategy - defining and fostering the right values (willingness to share knowledge, etc.) and creating the social spaces		

share knowledge

12:15-1:30	Lunch	
1:30- 2:00	 b) Case example on affecting culture to support KM How a government aid organization shaped its culture to support KM 	Gisella Wasmo SIDA
2:00-3:00	c) KM Boundaries – Existing knowledge resources and knowledge-pooling	Geoff Barnard, ID
3:00-4:00	Fostering Knowledge Management in the International Development Community – report on progress on initiatives agreed/launched following Washington session – further discussion of next steps, leadership and participation from community	
4:00-4:30	Summary observations on conference Closing thoughts and thank you from sponsors, etc. Plenary evaluation	Facilitator Sponsoring organizations Open exchange then complete and leave form
4:30	Close	

Appendix Two: Workshop Participants

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Appendix Three: Presenter Biographies

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Title: Head of Information

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Adrian BLUNDELL

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Adrian Blundell heads the information systems strategy and development section within the UK Department For International Development (DFID). He project managed the introduction of DFIDs first generation intranet in 1998 and also the Performance Reporting Information System for Management (PRISM) in 1999 based on earlier work with health and population aid effectiveness systems. His main challenges at present are the further development of PRISM and a second generation intranet, the introduction of electronic document and records management, a new human resources management system and the development of e-business strategies for DFID.

He has been with DFID for over 10 years working as a business analyst and project manager.

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Jean-Pierre Béguin has earned a licence in law from the University of Geneva and a PhD in political science from the Graduate Institute of International Studies in Geneva. He has worked successively in the World Bank, the Office of International Economic Affairs in Bern, the Organization of American States and the Inter-American Development Bank. Currently, he is a Senior Operations Specialist Analyst in the IDB and Co-coordinator of KENSTEER, the inter-departmental coordinating group for the Bank's Knowledge Exchange Network (KEN).

Stephen DENNING

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Stephen Denning is spokesperson on the Bank's major initiative to share its know-how, information and experience not only among its own staff, but also with its clients and partners around the world. As program director of knowledge management, a position he assumed in 1996, Mr. Denning chairs the Bank's Knowledge Management Board, which includes managers from across the Bank, and is charged with leading the knowledge-sharing reforms. He also coordinates the technology resources needed to implement this strategic shift in management of information and knowledge. Prior to holding this position, Mr. Denning held various management positions including director for the Bank's Southern Africa department, senior operations adviser for Africa, division chief for population, health and nutrition projects, initially in Latin America and the Middle East, and later in Asia and Eastern Africa. He has also been division chief for the Sahel Countries and the Bank's riverblindness program.

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Steve Glovinsky is a public management specialist with over twenty five years' experience with the United Nations Development Programme in the design and implementation of governance programmes and projects, including twelve years in field assignments. He has worked with a wide and diverse range of countries and organizations to provide methodological guidance and technical support in four areas: public sector rationalization, decentralization and area development strategies, institutional capacity building, and the management of change. Specific competencies include transition planning for state structures, strategic planning, organizational rationalization, programme and project formulation, business systems engineering, and process facilitation. Since August 1998 he has been the Coordinator of the "Global Hub" of UNDP's system of Sub-regional Resource Facilities – the SURF system.

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Email: peter.kibby(a)tfpl.com Web site: http://www.tfpl.com Peter Kibby is one of the team of experienced information and knowledge management consultants at TFPL. He joined the company in 1995 with a wide-range of experience in print and electronic publishing, and in-depth knowledge of database and indexing applications. His work creates strategies to harness appropriate technologies to business processes within the capacities of the people they are designed for. Central to these projects is a focus on improvement in service or profitability through innovation and the identification of customer value. In practice this means strategies and planning for intranets, web sites and knowledge management programmes, classification and indexing schemes and, for vendors, product and marketing strategies. He also runs training courses on the exploitation of technology for knowledge management and electronic publishing, and he has been technical director for the EC Telematics Application Programme's ETHOS project.

Prior to joining TFPL Peter worked for Blackwell Science, where he managed the commercial development of the award-winning Blackwell Idealist, full-text indexing software. During this period he assisted several hundred clients in the design of database and retrieval applications for their specific needs. Previously he has worked in production and marketing roles in scientific, educational and consumer publishing houses. His passions include travel, speed and food - and indexing technologies.

Lyle MAKOSKY Title: President

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Lyle Makosky is a senior executive with over twenty-eight years professional experience in the public, private and the not-for-profit sectors. His knowledge of strategy development, public policy, consultation and consensus building, and managing issues and organizations in the public interest, has been developed through managing several national associations and government organizations as well as designing and facilitating extensive consultations, public policy reviews, strategic planning and change management processes across Canada.

He is currently the President of InterQuest, which specializes in strategic and process consulting to the private, public and non governmental sectors. InterQuest draws upon interdisciplinary methods and models, and where appropriate, utilizes graphical software and real-time group technology to assist in the dialogue and decision process.

As a federal Assistant Deputy Minister with the Government of Canada, he designed and directed the Health Department's corporate, multi-year, strategic planning exercise, the most comprehensive and far reaching in the department's history. It lead to significant reform in the department's strategic and policy priorities and business lines and was the basis for their response to federal restructuring and budget cuts. As ADM for the Ministry of State for Fitness and Amateur Sport, he guided the reformulation of federal policy and programs during a period of intense scrutiny (Dubin Inquiry on Drugs, etc.) culminating in a new federal-provincial framework and landmark federal policy.

As Executive Vice-President for The Niagara Institute, he was instrumental in positioning the Institute as a national centre for senior leadership development and a non-partisan, issues resolution forum for business, government and labour executives. Mr. Makosky was also the national Executive Director of four national non-profit associations, successfully establishing their governance and cross-Canada programs during their formative years.

He has a Master of Science degree in Nuclear Physics and completed Doctoral coursework in Geophysics.

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Louis de Merode is Principal Consultant at Silver Creek Associates, which specializes in Communities of Practice and Knowledge Management Strategy. Before being on his own, he was with the World Bank for many years, first in lending operations and then as an internal consultant. Mr. de Merode's clients include Fortune 500 companies, The World Bank and the InterAmerican Development Bank. He is a sought after speaker at conferences on Knowledge Management and Communities of Practice. And he is an avid reader, runner and fly-fisherman.

Nick MILTON Title: Vice-President

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Dr. Nick Milton is Vice President and co-founder of Knowledge Transformation SM International. In addition to his managerial, Nick takes a direct involvement in client engagements, in provision of training, mentoring and knowledge capture/packaging services, and in publicizing the company through articles and conferences.

Prior to founding Knowledge Transformation SM International , Nick was Knowledge Manager for the Knowledge Management Team of British Petroleum and is widely as "a pioneer in Knowledge Management" (American Society for Training & Development).

Nick has an MA in Natural Sciences (1st Class) from the University of Cambridge, England, and a PhD from the University of Wales. He has authored several articles on knowledge management, and has been used as an expert resource for numerous books. He is a widely recognized coach and trainer, and has spoken at many international conferences, such as Unicom, EEMA, NORSOK EBIC, the Daimler/Chrysler corporate university, and the IBM technology college.

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Charles SAVAGE Title: President

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Dr. Charles M. Savage, President and Mentor, Knowledge Era Enterprises, Inc., helps companies discover the tremendous potential of knowledge era enterprising. He consults and speaks widely in the United States, Asia and Europe.

His book, Fifth Generation Management, has been widely acclaimed and translated into Japanese and Korean. Tom Peters named it his business book of 1991. A revised edition, subtitled, Co-creating through Virtual Enterprising, Dynamic Teaming and Knowledge Networking, has just been released and German and Portuguese translations are also available.

Dr. Savage works with company presidents, division managers and other senior executives committed to improving their business strategy, organizational agility, market responsiveness, and customer focus. He has pioneered the discussion of Fifth Generation Management as a way to tap and team the creative capabilities of professionals within and between companies. In particular, he has been focusing on the shift from the steep hierarchies of the Industrial Era to flatter network organizations based on dynamic teaming and virtual enterprising in the Knowledge Era. His clients include ABB, CIBC, Digital, Dow, Electrolux, Intel, Hyatt, ITT, Oracle, Martin Marietta and Siemens.

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Chris Smart is currently the Director of the Special Initiatives Program within IDRC's Corporate Services Branch. He joined the Centre in 1979 as a Program Officer in the Science and Technology Policy Unit. At various times he has been Deputy Director of the Fellowships and Awards Division, and of the Social Sciences Division.

Chris graduated in General Science from the University of Toronto and later crossed into the social sciences and humanities with an MSc in the History and Social Studies of Science from the Science Policy Research Unit of the University of Sussex.

After graduating from the U of T Chris was a secondary school teacher of science first in Canada and then in Sarawak with CUSO. After completing graduate studies in the UK he was Senior Tutor for four years in the Department of History at the University of Papua New Guinea. Before joining the Centre Chris was the Associate Director for Overseas Programs for World University Service Overseas of Canada.

Steve SONG

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Steve Song has worked in the field of information and communication technologies for development since 1991. Much of his experience is in Africa and particularly South Africa where he lived and worked from 1991-1996. Prior to that Steve worked in the computer industry in Canada and U.K.

Since returning to Canada, Steve has worked for the International Development Research Centre managing the Unganisha project; an initiative to improve the capacity of researchers in developing countries to utilize information and communication technologies for collaboration and information dissemination. He is now a senior programme officer at the Bellanet International Secretariat and is involved in developing capacity building resources for the more effective use of information and communication technologies.

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Pentti Sydänmaanlakka has a wide range of experience in all areas of human resource management with international background ranging from Europe, USA and Asia. He has worked with international companies like Nixdorf Computer, Siemens Nixdorf Information Systems and Kone Corporation. He is Director of Human Resources at Nokia Networks and is currently on his sabbatical leave focusing on reflection about organisational learning and self-management. He was also the chairman of the Finnish Association of Human Resources Management for two years.

Gisela WASMOUTH

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Gisela Wasmouth has her main professional experience from Sida. For twenty years she has had a number of managerial positions within the field of personnel. She has worked with internal and external recruitment to Sida, the UN organizations and the World Bank. She has also dealt with administration of personnel, staff wellfare and training. Since 1996 she is responsible for the transformation of Sida into a "learning organization", which includes writing policies, working out tools for analysis and evaluation, preparing and carrying through training programs etc.

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Appendix Four: Workshop Discussion on Distinguishing Knowledge and Information

Comment: One of the problems is that we are not very sure about what knowledge is. We give people information, not knowledge and it is overwhelming. Knowledge is really how you process that information. If you really want to help people you should give them the skills to process information more efficiently and productively. Sending people an email and sending them information often means that they don't have the time to process. Also, students tend to repeat what their lecturers say and not to produce their own ideas. This uncritical culture means that we are often not exchanging knowledge and people don't engage with information critically.

Comment: What you see as a user on the screen is information, but it is still useful to have gone through the process of discussing with people what knowledge is because it helps people think what their organisation is actually about.

Comment: In the processes that we've had in the past of extracting knowledge, it's been a process of translating knowledge into information. Some of the codification systems seem to translate knowledge into information. Jane Goodall's work on apes in Africa led to scientific observation that knowledge can often be stripped to be more easily classified and codified according to categories that are pre-set. It is important to take knowledge from where it actually derives and to find ways of putting it back again in ways that are useful and valuable to those settings. The concern for us is the relevance of knowledge management to the poor communities with which we work, to consider the relevance of what we are doing in relation to what it is we ought to be doing.

Comment: I think that we are all experimenting with ways to transmit information and knowledge. We're actually talking knowledge sharing, but we're not entirely clear what knowledge is and we don't talk about pulling knowledge back and not only putting knowledge out. Because we're confusing terms, we are not always talking clearly. It is in the application of information that it becomes knowledge. When a heart surgeon performs an operation and applies a new technique, it's knowledge. When he documents and reproduces it in a journal, it once again becomes information to someone who can make sense of it and use it and to another person who doesn't know about it, it remains data.

Comment: We've talked about maybe packaging information, but we haven't looked at the creation of new knowledge, and considered the intent and purpose for which knowledge is being created. If we can be clear about purpose, we can identify how to produce useful knowledge.

Comment: The Greek definition of knowledge includes three components: technology, epistemology and the ability to aggregate wisdom from social interaction. Knowledge by definition is contextual and derives by interaction in networks. Knowledge has to reside in networks which keeps it fluid and interactive. It has an indefinable component. The codification aspect, the contextual element is very important and we can only have this in a human network.

Appendix Five: Terms and Definitions

The following is a selection of key terms, definitions and concepts of knowledge management. They have to a degree been accumulated, refined and adapted to the field of international development. They are intended as working terms for the purpose of this workshop and are open to suggested improvements as we look to develop a core body of knowledge on this subject for our community.

Business modeling: The process of understanding an organization based on cognitive simplifications such as metaphor, simulation, process modeling, or explicit causal mapping. Business models allow organizational members to interpret (through explanation and/or prediction) organizational behavior.

Communities of Practice: "... groups of people informally bound together by shared expertise and passion for a joint enterprise -- engineers engaged in deep-water drilling, for example, consultants who specialize in strategic marketing, or frontline managers in charge of check processing at a large commercial bank. Some communities of practice meet regularly -- for lunch on Thursdays, say. Others are connected primarily by e-mail networks. A community of practice may or may not have an explicit agenda on a given week, and even if it does, it may not follow the agenda closely. Inevitably, however, people in communities of practice share their experiences and knowledge in free-flowing, creative ways that foster new approaches to problems." [Wenger, E. C. and W. M. Snyder (2000). "Communities of Practice: The Organizational Frontier." Harvard Business Review (January - February): 7]

Emotional intelligence: "It is the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (Daniel Goleman, 1998).

El refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions in us and in our relationships. El describes abilities distinct from, but complementary to, academic intelligence or the purely cognitive capacities measured by IQ.

Traditionally, the emphasis when evaluating potential performance has been on intellectual; now compelling research indicates that emotional intelligence is twice as important as IQ plus technical skills for outstanding performance. When IQ test scores are correlated with how well people perform in their careers, the highest estimate of how much difference IQ accounts for is about 25%.

As a manager of a telecommunications company sums it up, "You don't compete with products alone anymore, but how well you use your people". [Emotional Intelligence Services, HayGroup Web site, http://ei.haygroup.com/about_ei/]

Explicit Knowledge: Relates to the codified, recorded, externally visible knowledge of an organization—usually includes classified, quantified and documented enterprise events, descriptions and business processes. It is often but not necessarily housed in an enterprise's information system and stored in a computerized medium or document. It also includes the processes relating to the management of information systems.

Implicit Knowledge: Refers to the contextual surroundings of an organization or community that is imbued with and shapes the collective values, normative behavior, roles, customs, ceremonies and other rituals, expectations of events, expected contributions to the community, and even expected thoughts and conclusions. Examples

of implicit knowledge include acceptable holidays, proper ways of dealing with authority, customs for conducting meetings, expectations of performance and team participation, and so on.

Intangible Asset: Valued relationships and knowledge maintained by organizations that are not quantified or cannot be quantified acceptably in the current business environment. Examples include stakeholder relationships such as customer loyalty, supplier reliability, engineering know-how, employee competency, as well as intangibles such as trust, optimism, and experience.

Intellectual Capital: The intangible assets, and the capability to create more of said assets, of an enterprise that include the structural, customer, and human dimensions understood as the knowledge produced and embedded in systems, the relationships and affiliations of the enterprise and its people, and the skills and capabilities of employees.

Knowledge:

- 1) "the sense that people make of information" [PANOS Institute, "Information, Knowledge and Development", October 1998. http://www.oneworld.org/panos/knowlpap.htm]
- 2) " ... a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms." (Davenport, T. H. and L. Prusak (1998). Working knowledge: how organizations manage what they know. Boston, Mass, Harvard Business School Press.)
- 3) "In everyday language, it has long been the practice to distinguish between information data arranged in meaningful patterns and knowledge something that is believed, that is true (for pragmatic knowledge, that works) and that is reliable.

In recent times, theoretical objections to the concept of truth (e.g. by post-modernists) or to that of reliability (e.g. by positivists) have led to some blurring of the distinction. The interchangeable use of information and knowledge can be confusing if it is not made clear that knowledge is being used in a new and unusual sense, and can seem unscrupulous insofar as the intent is to attach the prestige of knowledge to mere information. It also tends to obscure the fact that while it can be extremely easy and quick to transfer information from one place to another, it is often very difficult and slow to transfer knowledge from person to another.

In assessing attempts to define knowledge it can be helpful to remember that the human mind has often been seen as capable of two kinds of knowledge — the rational and the intuitive.

In the West, intuitive knowledge has often been devalued in favor of rational scientific knowledge, and the rise of science has even led to claims that intuitive knowledge is not really knowledge at all. However, recognition of the difficulties inherent in transferring knowledge from one person to another has tended to highlight the importance of tacit knowledge e.g. notably in the writings of Polanyi (The Tacit Dimension, 1975), and Nonaka and Takeuchi (The Knowledge Creating Company, 1995). Some analysts have tried defining "knowledge" as wholly tacit (i.e. as capacity in action), thus consigning what others have considered as explicit knowledge to mere information.

In the East, the tradition has been to celebrate the importance of the intuitive, in comparison with the rational. The Upanishads for instance speak about a higher and a lower knowledge, and associate lower knowledge with the various sciences. Chinese philosophy has emphasized the complementary nature of the intuitive and the rational and has represented them by the archetypal pair yin and yang.

Debates about the meaning of knowledge have continued for thousands of years, and seem likely to continue for some time to come." (Box 2: What is Knowledge?) [Denning, S. (1998). What is Knowledge Management?, World Bank Knowledge Management Board: 19. http://www.worldbank.org/km/html/pubs_pres_what.html]

Knowledge Asset: The organizational resource (asset) that provides access to the required data and information and which supports the analysis of that data / information to produce the knowledge needed to:

- a) reach critical decisions within the business model, and/or
- b) inform/contribute to a 'Knowledge Generating Activity'.

Note: knowledge assets can be existing facts, data, models, concepts, etc, or the accumulated experience of people, or someone's insight or ability to problem solve, provide advice or create; and these assets can reside in people (expertise, leadership), data bases, information sources, organizational structures (teams, reporting relationships), business policy and practice (culture), etc.

Knowledge Ecology: A way of looking at organizations that emphasizes the interplay by the actors in a system of knowledge by focusing on the flow and transformation of knowledge processes. It is a network that constitutes a kind of ecosystem of ideas.

Knowledge Exchange: " ... a way of working and getting organized to create, capture and disseminate relevant knowledge, aimed initially at increasing individual effectiveness, transferring information and knowledge through all organizational levels and ultimately making it easily accessible so that all individuals can take effective action. Knowledge Exchange not only includes a corporate memory of information and best practices within the institution, but also incorporates the exchange of the best knowledge with outside organizations, both public and private. If properly implemented, Knowledge Exchange Programs should lead to better quality products.

Knowledge Management is a widely used expression, but it is quite defective: it appears to imply a centralized system and a certain opposition between 'givers' of knowledge and 'recipients' of knowledge. The expression of *Knowledge Exchange (KE)* seems to translate much better the driving qualities of interaction, reciprocity, equality and decentralization in the process of dissemination of knowledge." [Béguin, J.-P. and J. A. Estrada (1999). IDB KNOWLEDGE EXCHANGE NETWORK, Inter-American Development Bank (IDB): 36]

Knowledge Generating Activity: An activity or function that identifies and assembles data and information. In a business context knowledge generating activities support decision-making. Identifying gaps in research is a knowledge generating activity.

Knowledge Management:

1) 'There is no agreed definition of "knowledge management", even among practitioners. The term is used loosely to refer to a broad collection of organizational practices and approaches related to generating, capturing, disseminating know-how and other content relevant to the organization's business.

Some would argue that "knowledge management" is a contradiction in terms, being a hangover from an industrial era when control modes of thinking were dominant. Thus knowledge is not just an explicit tangible "thing", like information, but information combined with experience, context, interpretation and reflection. Knowledge involves the full person, integrating the elements of both thinking and feeling. Hence some object to the implicit

suggestion in the use of the term "knowledge management" that knowledge can be so managed, as revealing a fundamental misunderstanding of the nature of knowledge. Many practitioners increasingly see "knowledge sharing" as a better description of what they are about than "knowledge management". Others would prefer to emphasize "learning", since the real challenge in implementing knowledge management is less in the "sending" and more in the "receiving", particularly the processes of sense making, understanding, and being able to act upon the information available. Overall, whatever the term employed to describe it, knowledge management is increasingly seen, not merely as the latest management fashion, but as signaling the development of a more organic and holistic way of understanding and exploiting the role of knowledge in the processes of managing and doing work, and an authentic guide for individuals and organizations in coping with the increasingly complex and shifting environment of the modern economy.' [Denning, S. (1998). What is Knowledge Management?, World Bank Knowledge Management Board: 19. http://www.worldbank.org/km/html/pubs_pres_what.html]

2) An emerging management discipline that embraces knowledge as the core organizational asset in producing value, both internally and externally. It embodies organizational processes that seek the synergistic combination of information management and technology with the creative and innovative capacity of people.

Knowledge Mapping: A process that provides a 'picture' of the knowledge an organization needs to support business processes. ['The Language of Knowledge' (a glossary of knowledge management terms from The Delphi Group) in "Knowledge Management Meets Analysis" by Allison Rosset, American Society for Training and Development (ASTD).

http://www.astd.org/CMS/templates/template 1.html?articleid=22663

Knowledge Output: The end result of using knowledge assets in support of the knowledge generating activity. Outputs will differ depending on the stage in the organizations business cycle. For example, a knowledge output could be a conversation at the earliest stages of a project, a think piece to inform the decision-making process, a prospectus when a funding decision is required, or a report when feedback is required.

Learning: The iterative process of knowledge creation and transformation that results in new knowledge, skills, attitudes, and other cognitive, physical, or emotional capabilities.

Learning Organization: An organization that facilitates the learning of all its members and continuously transforms itself in response to changes in its business. It recognizes knowledge as an organizational resource and focuses not only on individual learning but also on collective or systemic learning.

Organizational Intelligence: "An organization's capability to process, interpret, encode, manipulate, and access information in a purposeful, goal-directed manner, so it can increase its adaptive potential in the environment in which it operates." (Glynn 1996)

Strategy: A course of action, prescribed or descriptive, that is enacted to attain desirable future states or avoid unpleasant ones using existing and anticipated resources. Alternatively, strategy can be defined as a plan, an emergent pattern of behavior over time, a position of an organization in an environment, a perspective of an organization's fundamental way of doing things, or a ploy designed to outwit an opponent.

Social Capital: The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit.

Tacit Knowledge: Reflects the "ways of doing" practiced by individuals and communities which cannot be fully articulated, if at all. Examples include knowing how to ride a bicycle, how to deal with a difficult colleague, when to end negotiations so that all participants feel they have contributed, how to make a medical diagnosis under uncertainty, how much is enough, and so on.

Value: An intangible good; an end or purpose of organizing.

Value Proposition: Articulates the fundamental business reasons and expected benefits that drive the organization.

Appendix Six: Workshop Sponsors

The Department for International Development (DFID)

The Department for International Development (DFID) is the British government department responsible for promoting development and the reduction of poverty. DFID aims to work in partnership with other governments committed to these targets, and with business and the private sector, civil society and the research community, supporting progress to reduce world poverty. http://www.dfid.gov.uk

The Swiss Agency for Development and Co-operation (SDC)

The Swiss Agency for Development and Co-operation (SDC)'s aim is to combat poverty by providing help towards self-help. In particular, it promotes economic and government autonomy, contributes to the improvement of production conditions, helps to solve environmental problems and strives for better access to education and basic health care for the most disadvantaged population groups. http://194.230.65.134/dezaweb2/home.asp

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) is a service enterprise for development cooperation with world-wide operations. Owned by the Federal Republic of Germany, the organisation operates as a private-sector enterprise with a development-policy mandate: to make sustainable improvements to the living conditions of people in partner countries, and to conserve the natural resource base on which life depends. http://www.gtz.de

Canadian International Development Agency (CIDA)

The Canadian International Development Agency (CIDA) is the lead player in delivering Canada's official development assistance program. (...) The cornerstone of our development assistance program is to support sustainable development in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

http://www.acdi-cida.qc.ca

Bellanet International Secretariat

Bellanet is an international initiative working with the development community to increase collaboration. We support partnerships by providing advice and assistance on more effective use of information and communication technologies (ICTs).

http://www.bellanet.org