# Design of and practical experiences with the Learn@WELL knowledge management module

Jaap Pels and Frank Odhiambo

## Introduction

Learn@WELL (Water and Environmental Health in Developing Countries), also known as WELL, is a resource centre network that promotes environmental health and well-being in developing countries. Funded by the UK's Department for International Development (DFID), the network is managed by the Water, Engineering and Development Centre (WEDC), UK; International Water and Sanitation Centre (IRC), The Netherlands; and the London School of Hygiene and Tropical Medicine (LSHTM), UK, in collaboration with Southern network partners. WELL's six Southern partners are the African Medical and Research Foundation (AMREF), Kenya Country Office; Institute of Water and Sanitation Development (IWSD), Zimbabwe; Centre for Health and Population Research (ICDDR), Bangladesh; Network for Water and Sanitation (NETWAS), Kenya; Training Research and Networking for Development (TREND), Ghana; and Social and Economic Unit Foundation (SEUF), India.

One of WELL's objectives is to strengthen the network through capacity building so that it may better provide services. This is accomplished through a series of modules designated Learn@WELL, one of which deals with knowledge management (KM). Other Learn@WELL modules focus on analytical skills, consultancies, writing and dissemination. A 'know-your-client' module is in preparation. All these modules have been developed in consultation with network partners so that the capacity building meets their needs.

In this article we elaborate on the design of and experiences with the KM module. First, we introduce the KM concept and describe how it is being introduced to WELL partners through the Learn@WELL KM module. We provide a rationale for the module and describe the main activities within it. We also present KM plans developed by WELL partners.

## Knowledge management

Knowledge management originated in management science. Perhaps, the strongest influence was Nonaka's book *The knowledge creating company*, with its now famous distinction between tacit and explicit knowledge (Nonaka and Takeuchi 1995). The KM movement gained momentum with the idea of sharing best practices through intranet software and with the attempts of Accenture (ex-Andersen), Ernst and Young, British Petroleum, Amoco and others to do so. KM has become a byword in the

development sector only since 1996, when the World Bank initiated its transformation into a 'knowledge bank' (Carayannis and Laporte 2002), although many development organisations claim to have practised KM before it was labelled as such.

KM aims to facilitate the supply of the right knowledge to the right person at the right time. This is something most organisations aspire to, so it was not surprising that all six WELL partners requested a module on KM within Learn@WELL. A number of factors have driven this widespread interest in KM in recent years. First, the development of electronic media has offered new tools, including e-mail, the Internet and intranets, and these have made it easier to find, accumulate and transfer information within an organisation. For an overview of KM applications and enabling technologies see Binney 2001. Second, in the development sector, many staff spend a large proportion of their time outside the office on field trips. As a result, the office environment has been extended and no longer exists only at one's desk. Third, the job for life is no longer a given. It is not unusual to work an average of three years for an organisation and move on.

So, why do these factors make KM necessary? KM refers to the effective use of an organisation's knowledge. This knowledge is found largely in people (Sveiby 2001). Thus, printed documents and databases offer only limited access to the total knowledge resource of any organisation. Given the three factors outlined above, it is increasingly difficult to access knowledge because the people who have it are either unavailable, have left the organisation or do not package and store information in such a way that other people can find and digest it, thereby creating knowledge appropriate to their context. Knowledge has become a transient asset. In this context, development organisations now seek to employ KM in their fight to retain their comparative and strategic advantages, which are under threat in this new competitive environment. In other words, development organisations are using KM to achieve their goals through a structured and inclusive approach.

## Information management versus KM

We have discussed the origins of KM and explained why it has become important. But we have not defined the term. There are numerous definitions of KM and different understandings of its scope. KM is frequently and mistakenly equated with information management (IM). Definitions such as 'methods and tools for capturing, storing, organising and making accessible knowledge and expertise within and across communities' only contribute to the confusion (Walker and Millington 2003). There is an important distinction between the two concepts. In information management, one is concerned with documents and in particular with information access, technical handling, security, storage and delivery. KM, on the other hand, is concerned with the human aspect of information utilisation. As such, KM is about developing systems and processes that leverage information and knowledge in an organisation to promote originality, creativity, intelligence and learning. According to Ackoff, the content of the human mind can be classified into five categories (1989):

Category	Provides answers to
Data: symbols	
Information: data that are processed to be	'who', 'what', 'where' and 'when'
useful	questions
Knowledge: application of data and	'how' questions
information	
Understanding: appreciation of 'why'	'why' questions
Wisdom: evaluated understanding	

The above is an elaboration of the frequently encountered data-information-knowledge continuum. To avoid academic discussion of what knowledge is, we have defined it for the purposes of the module as 'information in use'. In this way we bring together two main interpretations of KM, with one emphasising 'information' and the other human resource management (HRM) or 'capacity to act' or 'use'. KM is about knowledge-friendly organisations (KFO), that is, improving knowledge-sharing mechanisms and practices in organisations or networks (Weggeman 2000). In other words, KM is concerned with establishing environments for people to create, leverage and share knowledge (Sveiby 2001)

## **Communities of practice**

Most people in an organisation obtain their information from face-to-face meetings or in conversation. What is often lacking in an organisation, though, is a supportive culture that encourages openness and knowledge sharing. It is a challenge to get professionals with a common interest to interact, share, create and update information where this is not the norm. Perhaps for that reason, and because it is relatively easy, many organisations centre their KM strategy on building information repositories. In fact, a clear indicator of a non-supportive knowledge sharing culture is a decision to put the IT department in charge of KM. Whilst repositories have their place, they can never be a substitute for what is contained in people's heads. Knowledge is contextrelated, re-created or re-invented. Communities of practice (CoPs) are therefore an essential strategy for any KM programme. CoPs are groups of people who share an interest and interact to learn with and from one other. This goal of learning marks the difference between CoPs and pure socialising. The more colleagues interact, the less time they will spend re-inventing the wheel. Several studies show that 20-30% of an organisation's resources are wasted reinventing the wheel (Boshyk 2000). KM should, therefore, be people-oriented and technology-enabled but not technology-driven.

## Scales of KM

KM can be practised at three levels. First is the personal level, at which individuals acquire and create knowledge, manage documents, share learning and collaborate with colleagues (Richardson 2001). Ideally, each and every person in an organisation should take responsibility for what he or she knows, does not know or wants to know. This makes it easier to implement KM initiatives at the organisational level, with a focus on creating, capturing and re-using knowledge to attain the organisation's

objectives (Weggeman 2000; Sveiby 2001). We stress once again that efforts at this level should be directed at establishing a culture of openness and knowledge sharing as well as encouraging face-to-face and interpersonal communications (<a href="http://www.eknowledgecenter.com">http://www.eknowledgecenter.com</a>). Finally, KM can take the form of networking, as in WELL. At this level, staff come together to leverage information, skills and experience, sharing among themselves to achieve common objectives. For this to succeed, solid communications and regular (exposure) visits between partners are crucial.

## The Learn@WELL KM distance learning module

In July 2002, WELL partners expressed interest in having a KM module under Learn@WELL. Consequently, the authors were designated to develop the module, with IRC taking the lead. Following e-mail communication and a face-to-face meeting, we adopted Weggeman's 'knowledge value chain' as the main conceptual tool for the module (Weggeman 2002). Our aim in doing so was to give the module a practical rather than theoretical orientation.

The model consists of a matrix (see Figure 1), which provides a framework for analysing activities in relation to a given KM goal. The matrix consists of knowledge processes: creation, sharing, application and evaluation. Each of these is analysed using McKinsey's 7S framework (Peters and Waterman 1995), which includes the following variables: strategic considerations, management style, organisational culture (shared values), organisational structure, personnel (HRM, staff) and ICT-related issues (systems). It is a powerful model that provides an easy-to-use framework for analysing KM goals or objectives. Experience shows that translating an organisation's vision and mission into practical organisational goals can be a challenge. When this model is applied, all crucial questions for formulating a practical goal are brought to the table. This includes questions without answers or with political overtones. For example, the model considers management style as a key variable. Internal political considerations are often a key factor influencing management style.

In terms of delivery, the KM module is different from its sister modules. Learn@WELL modules usually consist of 'books'. A typical module book introduces concepts, uses case studies and includes a number of exercises. The KM module, in contrast, is built around a series of practical activities, with the authors providing support as mentors. For example, the first activity within the module is to develop a basic plan stating the organisation's KM goals. Our reason for adopting this approach is that KM is essentially a personal activity, focused on improving knowledge-sharing mechanisms and practices in organisations and networks. It would, therefore, be inappropriate to design a one-size-fits-all module. We believe that a module aimed at structured self-development through the implementation of a KM plan better satisfies each organisation's unique needs.

A second feature of module delivery is that it involves a mentoring (as opposed to a lecturing) approach, founded on the understanding that partners signing up for the module take full ownership of its implementation. So, for example, the partner

organisation rather than the mentors formulate the goal for the organisation's KM plan. Likewise, all resources for implementing the plan are underwritten by the partner. The mentors simply initiate, advise and instigate in accomplishing the tasks listed below:

- Introduce KM as a concept and its underlying principles (initiating);
- Provide assistance in developing KM plans (advisory);
- Share lessons learned from WEDC's and IRC's own experiences in this area (advisory);
- Facilitate local workshops hosted by the partners (instigating); and
- Provide guidance on appropriate literature (instigating).

Figure 1: Weggeman's knowledge value chain model.

Mission		Create		Share	Apply	Evaluate
Vision	Needed	Available	Develop			
Goals	Knowledg	ge		Knowle	dge	
Strategy						_
Culture						
Management style						
Personnel						
Structure						
Systems				Web site	e	

Source: Weggeman 2000

The model used in the Learn@WELL KM distance-learning module is the knowledge value chain, taken from Weggeman (2000). It consists of four main steps to achieve operational goals (for example, running an inquiry service in water supply and sanitation), as shown in the top shaded rows of the table: create (what is needed, what is available and what knowledge needs to be developed), share, apply and evaluate. This is also referred to as the 'knowledge lifecycle'. The lifecycle is fed by operational goal(s) flowing from the organisation's mission and vision (non-shaded portion of the first column).

The **processes** are planned in detail, using McKinsey's 7S Framework. These are referred to as organisational design variables (ODV) and are listed in the shaded portion of the first column:

- Strategy: direction and scope of the organisation over the long term;
- Shared values: culture, values and beliefs of the organisation, which, ultimately, guide employees towards 'valued' behaviour;
- Style: management style; refers to the leadership approach of top management and the organisation's overall operating approach;
- Personnel: capabilities and competencies within the organisation; what it does best; the organisation's human resources and how they are developed, trained and motivated;
- Structure: basic setup of the organisation, its departments, reporting lines, areas of expertise, skills and responsibilities and how they inter-relate; and

 Systems: formal and informal procedures that govern everyday activity, covering everything from management information systems, through to systems at the point of contact with the customer.

KM is about organising the processes in such a way that they contribute directly to the competitive edge of an organisation. From the model, it is clear that information technology is not the only means to improve KM. A Web site (see Figure 1), for example, is just a system to share knowledge and information. Strategy, structure and systems are easily influenced. The other organisational design variables – skills, shared values, staff and style – are far more difficult to change.

## **Module activities**

The foregoing gives background to the content of the module. In this section, we have a look at some of the activities under the module.

The first step is to decide the focus of the KM initiative. Under the module, it is envisaged that the KM initiative will be implemented over time in blocks. The mentors support the implementation of the initial stage of the KM initiative, based on a KM plan. It is hoped that, by going through the process of developing and implementing a plan, the partner's KM team will learn how it is done and go ahead to implement the balance of the initiative.

One key activity is to create a personal KM map of one's own information behaviour (skills, experience and attitudes) (see Figure 2). Data to construct the map are collected through a questionnaire, which can be modified, where necessary, to suit each organisation. The map addresses KM at the personal scale. The main questions are:

- 1. Who are you working with?
- 2. How do you obtain the information you need?
- 3. How do you share information and knowledge?
- 4. How do you document what knowledge you have?
- 5. What do you need to learn?

The aim of personal mapping is to get people to think and talk about their information behaviour in a systematic way and to take steps to modify it, where necessary. Group discussions of individual KM maps provide opportunities for suggestions to be made about how individuals may modify their information behaviour to contribute to effective knowledge sharing within the organisation. Personal knowledge mapping need not be tied to a KM initiative. It could be adopted as a function of the organisation's human resource department, for example.

Figure 2: Sample data for personal knowledge mapping.

Who are you working with?	
Aids control society	Government departments
Community groups	Local self-government bodies
Different government departments	Other NGOs
Donor agencies	Professional and religious institutions
Educational institutions	School children
External agencies	Women groups

How do you share information and knowledge?	
Face-to-face discussion	Staff meetings
Newsletters	Telephone conversations
Project reports	Trainings
Reviews	Web site

What do I need to learn?	Self-assessment by staff: $1 = \text{no } 10 = \text{yes}$				
Source	Staff 1 Staff 2 Staff 3 Staff				
Computer use	10	9	-	9	
Writing skills	10	8	3	9	
Training skills	8	5	5	7	
Communication skills	8	8	5	8	
Language skills	10	10	5	10	
Attitude to learn, write and share	10	7	2	8	

Another activity involves constructing an organisational profile (see Figure 3). Individual staff members fill in a standard questionnaire designed to build a KM profile of the organisation. The answers to the questionnaire are discussed and combined to provide an overall profile. This final profile should demonstrate the degree to which the organisation's KM initiative (if one exists or is labelled as such) is understood. This activity addresses KM at the organisational scale.

Figure 3: Questions for developing an organisational profile

Mission of the organisation or mission statement
Vision of the organisation or vision statement
Strategy of the organisation
Organisational goals
Who is the KM champion in the organisation?
How many staff work directly on KM?
What are the key sources of inspiration that guided your KM strategy? Who influenced
you?
Does the KM strategy have links to other strategic initiatives within the organisation?
Describe.
What are your indicators of success?
General narrative description of the KM initiative at the organisation.
An anecdote.

Source: Selection adapted from organisational KM profiles at http://www.km4dev.org

# The KM scan<sup>1</sup>

The purpose of a KM scan is to provide a baseline assessment of staff perceptions with regard to the position of KM in the organisation. The scan we use for the module consists of a series of four questionnaires. The first (how good are we at KM?) examines perceptions of processes in the knowledge value chain referred to above: creation, sharing, application and evaluation. A second questionnaire (how knowledge-oriented is our organisation?) deals with issues around the 7S framework, which includes the following: KM strategy, management style, culture, systems, structure and personnel. The remaining two questionnaires address issues having to do with the importance of knowledge in the organisation and the organisation's vision and mission. It is a good idea for as many staff as possible to take the KM scan, as this leads to more representative results.

The KM scan is based on the KM model by Weggeman. Figure 4 gives a sample of the results of a KM scan.

Figure 4: Sample results of a KM scan, based on the Weggeman model.

Overall average	66					
Maximum	71	72	70	71	70	62
Minimum	66	66	64	65	65	57
	Knowledge needed	Knowledge available	Develop / acquire knowledge	Share knowledge	Apply knowledge	Evaluate knowledge
Strategy	66	66	64	65	65	57
Culture	68	69	67	68	67	60
Management style	70	70	68	70	69	61
Personnel	71	72	70	71	70	62
Structure	66	67	65	66	65	58
Systems	66	67	65	66	65	58

The above table shows the outcome of the KM scan on a scale of 10 to 100. The figures are a straightforward average of all answers (on a scale of 1 to 5, in which 1 is poorly and 5 excellent) by individual staff. The questionnaire is filled out anonymously. A more elaborate analysis could filter out deviant answers. The weakest links, as perceived by participants in the example above, are evaluation, strategy, systems and structure. After interventions in these aspects, the KM scan could be repeated to measure effect.

## Using the KM module

As noted above in the discussion of 'module activities', KM should be introduced to an organisation in an incremental fashion and in short bursts. There are three advantages to this approach. First, the benefits of a KM initiative are seen more quickly if the initiative is implemented block by block, with each block designed to show benefits (quick wins, low-hanging fruit<sup>2</sup>). This makes it easier to gain commitment for further action. Second, KM is about people. It is simpler to introduce change in small steps rather than cause a major upheaval within the organisation. Third, implementing the initiative in blocks avoids the danger of an ambitious plan getting lost in generalities, with the result that nothing happens and the plan ends up in a drawer.

Thus, the KM initiative should be based on modest and achievable KM plans. The knowledge value chain described earlier provides a framework for developing the plans. Following are examples of KM plans developed using the WELL KM module. The main characteristic of these plans is that they are modest. Our advice is to keep the plans simple to increase the chance of their being implemented.

### KM plan - SEUF

SEUF (<a href="http://www.seuf.org">http://seuf.watsan.net</a>) has a coordinating office, four regional offices, one technical support wing and seven project offices. Its ambition is to become a leading resource centre in the region. Partners identified a lack of information sharing in SEUF as a major obstacle to achieving this ambition, and they have developed two plans to address this problem.

KM Plan 1: Information sharing through the SEUF Web site:

- Use skills gained through the Learn@WELL writing skills module to provide quality material for the Web site;
- Repackage existing outputs to serve different online target groups; and
- Develop an inventory of staff skills, attitudes and experiences and use these to allocate responsibilities for Web site management and to inform organisational human resources needs.

KM Plan 2: Internal information sharing through improved project documentation:

- Make results and experiences from projects more explicit, thereby creating leverage for information sharing;
- Document proposal development;
- Create central project files; and
- Document project activities and outcomes.

These two plans were developed during a workshop attended by staff from two SEUF regional offices. Some workshop participants in turn facilitated a second workshop with colleagues in the four remaining regional offices to introduce them to KM concepts and acquaint them with the KM plans developed. Implementation of these plans will cut across all six regional offices. Meanwhile, SEUF has plans to change its

Web architecture and develop an intranet under an initiative of IRC and Resource Centre Development (RCD). These two measures dovetail with the KM plans developed. When implemented, they will represent a major step towards SEUF becoming a resource centre. Additional KM plans were drawn up in the second workshop to complement the two indicated above.

#### KM plan - AMREF

AMREF is a large organisation (<a href="http://www.amref.org/departments.htm">http://www.amref.org/departments.htm</a>). The module was used at the AMREF Kenya country office (KCO) in the water and health department. The workshop was also attended by some staff from AMREF headquarters, also based in Nairobi, Kenya. It was revealed at this workshop that the headquarters had a KM initiative, which had been under way for a while. After the workshop, the KM scan was administered to 35 respondents drawn from a heterogeneous group of technical staff at KCO, comprising members of the senior management team, programme managers and zonal coordinators, project managers and officers who had been selected to participate in the 18th KCO Programme Meeting. They also compiled their personal knowledge maps, as described above. These maps revealed that information in KCO is shared using various methods. Most respondents said they use reports and electronic communication as a way of sharing information. Other methods include newsletters; consultative meetings; verbal communication in workshops, seminars and conferences; and published materials.

Various obstacles to information sharing were identified. These were time constraints (24%), poor feedback on information shared (15%), limited access to ICTs (15%), poor understanding of audience information needs (15%) and inadequate funds to support information dissemination (15%). Other issues identified included a lack of a reading culture by staff, lack of relevant skills related to information sharing, lack of moral support, limited opportunities to share information and lack of a strategic focus on information sharing.

#### KM plan - IWSD

The aim of the KM workshop at IWSD (<a href="http://www.iwsd.co.zw">http://www.iwsd.co.zw</a>) was to provide an understanding of how KM can be used to leverage corporate knowledge to meet the organisation's vision, mission, and goals. A major exercise in the workshop was the development of KM plans. Fortunately, high workshop attendance by IWSD staff made it possible to develop four KM plans. The topics of each plan are detailed in the box below.

Figure 5: IWSD's KM plans

Thematic groups	Strategic issues/KM plan
Research	Resource generation/acquisition
Information and marketing	Positioning/branding IWSD, profile raising,
	Web presence
Technical/training	Product development, new work
Administration and finance	Resource allocation/transparency/compliance

Our interpretation of these topics reveals a common thread in the four proposed KM plans; they all address key strategic issues for the organisation. Our interpretation of

these issues is detailed in the second column of the box above under the heading 'strategic issues'.

#### Our observations on the module

KM, as has been stated, involves organisational change. It is well known that organisational change often meets with resistance. Fortunately, this has not been the case within the organisations we have worked with. This may be in part because the idea for the KM module came from the partners themselves. They also took responsibility for organising the workshop and creating its terms of reference. Consequently, even though partners did not fully understand exactly what the module would entail, they have shown a commitment to seeing it through (organising a workshop, completing the exercises mentioned above, drawing up KM plans, taking ownership and implementing plans). Thus, partners had pre-established incentives to adopt the KM approach, and there was no need to put in place an incentive structure. Nonetheless, we have emphasized in the workshops some of the benefits that accrue from implementing a KM plan, together with commitment from management, to provide further incentives. In Figure 6, we offer our assessment of the situation of the three organisations, based on the five lessons from pioneers, as mentioned by Sveiby.

Figure 6: Assessment based on lessons from the pioneers (Sveiby 2001)

Lesson	SEUF	AMREF	IWSD
Enthusiastic champions	Yes	Yes	Yes
Build on existing core competence	Yes	No/HQ yes	Yes
Address an urgent strategic imperative	Yes	No	Yes
Firm commitment from the top	Yes	Yes/HQ?	Yes
Early quick wins neutralise the nay-sayers	N.A.	No	N.A.

The delivery of the module has had both problems and successes. First, a lack of resources meant that there was no opportunity for face-to-face meetings. A direct consequence of this was that it was inordinately difficult to effectively communicate KM concepts by e-mail. This led to a situation in which, for several months, little progress was achieved. In the event, a financial allocation for workshops was made available in the 2003/2004 financial year. These workshops provided a forum for communicating KM concepts, learning through exercises, undertaking the KM scan and the creation of KM plans.

Second, although the workshops have largely been successful, it was inevitable that the momentum achieved during workshops would diminish. To counter this tendency, we have made the case for continued support to the organisations in implementing their KM plans. Preliminary indications are that this strategy has been successful.

On the positive side, introducing the module and KM concepts through workshops has been very successful. This is attributable to facilitators being on hand to explain the KM value chain and answer questions relating to the matrix. The workshops have also been an ideal forum for explaining the logic underlying our approach as well as an

opportunity for us to gain an understanding of both individuals' and organisations' expectations of the KM module.

Allowing each organisation to determine its KM priorities proved effective. This was possible because the KM value chain, our main planning tool, is flexible and applicable to any situation. As a result, our role as facilitators in the workshops has been simply to explain what a KM approach is and to give examples of situations that are amenable to KM solutions. A vast number of examples are available in the literature and have been categorised by Binney (2001). It is easy to choose and adapt these. The discussion of examples provides a great opportunity to discuss the 'not-invented-here' syndrome. Participants are then in a position to identify situations and problems in their own working environments, which they can then analyse using the value chain, and to plan an appropriate intervention to improve the situation.

## **Assessing progress**

As far as we know, an approach like that described here has not been tried before. We were keen therefore to have a number of indicators in place to monitor progress in the implementation of KM plans. For this purpose, we decided to use milestones in the initial round of the module, working with AMREF and SEUF. However, our monitoring revealed that this in itself was not enough, as the agreed milestones were not tied to a timeline. As a result, in the third round of the module, working with IWSD, we changed the planning process to link milestones to a timeline. We hope this facilitates an objective assessment of progress in the implementation of IWSD's KM plans. At present, IWSD have not reached any of their milestones, so we cannot report how well this is working.

A second indicator we hope to use, albeit in the medium term, is the KM scan previously referred to. Each organisation undertook a baseline scan at the start of the module. We intend that each partner organisation will repeat the scan a year after they start implementing their plans. The results of this second scan should show improvement in staff perceptions of the organisation's position with respect to KM. This will serve as a triangulating tool for assessing progress.

The module delivers concepts (what is KM), tools (personal knowledge map, organisational profile and KM scan), examples and a structured approach (the Weggeman knowledge value chain) to determine which processes need improvement to achieve organisational goals, based on the organisation's vision and mission. Important signs of progress are an awareness that KM is more than knowledge sharing, that KM differs from IM, that KM may entail IT and, most important, that KM starts in the personal realm.

#### Lessons learned

Our experience with the module so far has been, on the whole, positive, and we have drawn from it the following lessons learned. First, KM is about people working together and not necessarily about IT. Only one of the three plans developed in the organisations we worked with has included a major IT component. Second, implementing a KM approach requires staff time. There is, therefore, a cost attached to KM, which has to be factored into one's planning. Apart from staff costs, implementing a KM approach does not necessarily lead to expenditures on IT-related equipment.

Third, implementing KM in an organisation is a long-term endeavour. It cannot be done in the short term. For that reason it is important to define ways of maintaining momentum before results become apparent. The character of an organisation defines what works and what does not. For example, AMREF is a large organisation, so winning support from the top takes time and effort. IWSD is a relative small organisation, so solutions based on face-to-face interaction can be implemented easily. SEUF is dispersed over Kerala, India, and thus has to rely more on the exchange of explicit knowledge (information) in its KM initiative.

Fourth, SMART milestones (simple, measurable, applicable, realistic and time-bound) are needed to objectively assess progress in meeting KM objectives. For example, running a bi-weekly communications meeting as a means of sharing knowledge can be traced by SMART milestones.

#### References

Ackoff, R.L. (1989) 'From data to wisdom.' *Journal of Applied Systems Analysis* 16:3-9 [accessed 20.04.04] <a href="http://www.systems-thinking.org/dikw/dikw.htm">http://www.systems-thinking.org/dikw/dikw.htm</a>

Binney, D. (2001) 'The knowledge management spectrum - understanding the KM landscape.' *Journal of Knowledge Management* 5(1):33-42

Boshyk, Y. (2000) 'Beyond knowledge management: how companies mobilize experience.' In: *Mastering information management*. (edited by D.A. Marchand and T.H. Davenport), Prentice Hall: London, pp.51-55

Carayannis, E.G. and B. Laporte (2002) 'By decree or by choice? Implementing knowledge management and sharing at the education sector of the World Bank Group.' World Bank Knowledge management: Washington D.C. [accessed 07.04.04] <a href="http://www.kit.nl/frameset.asp?/specials/html/km\_knowledge\_management.asp&frnr=1&">http://www.kit.nl/frameset.asp?/specials/html/km\_knowledge\_management.asp&frnr=1&</a>

Nonaka, I. and H. Takeuchi (1995) *The knowledge creating company*. Oxford University Press: Oxford

Peters, T.J. and R.H. Waterman (1995) *In search of excellence: lessons from America's best run companies*. Harper Collins: London

Richardson, D. (2001) *The practical reality of knowledge management within development initiatives*. Prepared for the International Fund for Agricultural Development's Electronic Networking for Rural Asia/Pacific Projects (ENRAP), 2<sup>nd</sup> Comprehensive Workshop, Singapore, 6-9 February 2001 <a href="http://www.telecommons.com/uploaddocuments/Practical\_Reality\_of\_KM1.doc">http://www.telecommons.com/uploaddocuments/Practical\_Reality\_of\_KM1.doc</a> [accessed 20-04-04]

Sveiby, K.E. (2001) *Knowledge management–Lessons from the pioneers*. <a href="http://www.sveiby.com/KM-lessons.doc">http://www.sveiby.com/KM-lessons.doc</a> [accessed 16.02.05]

Walker, A. and K. Millington (2003) 'Business intelligence and knowledge management: tools to personalise knowledge delivery.' *Information Outlook*, August 2003

Weggeman, M. (2000) Kennismanagement: de praktijk. Scriptum: Schiedam

#### Acknowledgements

Many thanks are due to the staff of SEUF, India; MREF, Kenya Country Office; and IWSD, Zimbabwe. Special thanks go to Suma Mathews, Beena G., Jerry Ndama, Marjory Cusotera, Gerald Rekunga and David Mutheti, who took ownership of the learning process and played a pivotal role as KM champions. We would also like to acknowledge support received from WEDC, IRC and DFID, which made it possible to run this module.

#### **Abstract**

Academics, consultants and publishers are pouring out information, both online and in print, on knowledge management (KM). Only an experienced KM practitioner is able to separate fads from applicable information and transform that information into action. KM is essentially about managing activity aimed at improving knowledge-sharing mechanisms and practices in organisational networks or communities of practice (CoPs). This article introduces KM and describes how it is being introduced to partners in WELL (Water and Environmental Health in Developing Countries) through the Learn@WELL KM module. The article provides the rationale for the module and describes the main activities within it. Some KM plans prepared by Southern partners are described.

#### **About the authors**



Jaap Pels is Senior Programme Officer Knowledge Management in the Information and Communication Section, IRC, better known as 'idea guru' or SCORE (Strategic, Conceptual and Organisational Right Hand of Executives). He received an MSc in molecular sciences, with a physical chemical orientation (Agricultural University Wageningen, The Netherlands); he is also a graduate of De Baak management courses and is self-taught in information science

and knowledge management. Jaap worked for 20 years for the Netherlands Consumer Association (Consumentenbond) as project leader, product and services researcher, senior finance researcher (coaching research professionals on financial services) and information manager. He has special interest in organisational and institutional building, organisational memory and learning (especially from external relations),

network society, user-driven search technology and ICT use, with emphasis on the 'C'. Languages: Dutch, English and German.

Jaap Pels, P.O. Box 2869, 2601 CW Delft, the Netherlands. http://www.irc.watsan.net/.

Personal Web page: <a href="http://www.irc.nl/page/16004">http://www.irc.nl/page/16004</a>

E-mail: pels@irc.nl



Frank Odhiambo is a Programme Manager with the Water, Engineering and Development Centre (WEDC), Loughborough Univeristy, UK. His interests are in knowledge management, dissemination, networking and communication with a niche interest in scientific communication. One of his roles germane to this paper is that of Programme Manager for resource centre network development in WELL. WELL is a DFID-sponsored resource centre network

offering information and support in water, sanitation and environmental health. Outside of work, Frank enjoys classical music, walking and fitness. Frank Odhiambo, Loughborough, LE11 3TU, UK. Phone: +44 (0)1509 22 2396. <a href="http://www.lboro.ac.uk">http://www.lboro.ac.uk</a>. Personal Web page: <a href="http://wedc.lboro.ac.uk/staff/staff">http://wedc.lboro.ac.uk/staff/staff</a> details.php?id=26 E-mail: <a href="foo.odhiambo@lboro.ac.uk">foo.odhiambo@lboro.ac.uk</a>

#### **Endnotes**

<sup>1</sup> For a free trial of the KM scan, see <a href="http://www.provenbenchmark.nl/custom-scans/kmscans">http://www.provenbenchmark.nl/custom-scans/kmscans</a>

<sup>&</sup>lt;sup>2</sup> Sveiby 2001. Because KM is so diverse, so are the KM approaches proposed. Some common themes emerge: enthusiastic champions, building on existing core competence, addressing an urgent strategic imperative, firm commitment from the top and early quick wins to neutralise the nay-sayers.