

Virtual knowledge communities: lessons learned in making them work

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Why an online community?

In the development sector, knowledge sharing and social learning are fundamental to how practices are improved.¹ This sharing and learning often takes place in informal and formal networks. Since the explosive growth in the use of ICTs, much of this networking is taking place through the medium of online networks, facilitated by groupware. At the Royal Tropical Institute (KIT), such communities are called virtual knowledge communities (VKCs). KIT recognises these communities and networks as being critical to development, because they have the potential to:

- Serve as an ongoing learning venue for practitioners who share similar goals, interests, problems, and approaches;
- Provide rapid responses to individual inquiries from members;
- Develop, capture, and transfer best practices on specific topics, by stimulating the active sharing of knowledge;
- Influence development outcomes by promoting greater and better-informed dialogue between stakeholders;
- Link a diverse group of practitioners from different disciplines;
- Promote innovative approaches to address specific development challenges.

At the end of 2004, KIT Information and Library Services (KIT ILS) started with three VKCs.² After 20 weeks of operation, the VKCs were evaluated and decisions were made about future plans.

The evaluation was carried out with the statistical findings to determine the usability (with a focus on how well the user interface supports human-computer interactions). This does not say anything though about the motivation to participate, nor the 'satisfaction' of the user. Therefore, ethnographical methods were used, such as online and personal interviews with members, to learn more about the sociability of the communities (i.e. the 'reason for' and 'result of' the interaction between members).

The development of the platform, interest areas and objectives

Recent developments within KIT ILS are founded on the principle that information is of crucial importance to the development of knowledge in a fast changing society, and that new ICTs are able to facilitate and stimulate information exchange.³ As such, core competencies of KIT ILS comprise the provision of access to information for development purposes, using a variety of media such as printed materials and online information. On the basis of these competencies, professional advice is provided for information service providers, aimed at strengthening their capacity, particularly in developing countries.

Consequently, KIT ILS decided in June 2003 to start three VKCs with the general objective to provide professionals in developing countries with information to better carry out their work, on the following themes:

- 1) Gender, Society and Development;
- 2) Sexual Health;
- 3) Information and Library management.

VKCs 1 and 2 were developed to support already existing documentary products: Gender, Society and Development is an annual book series, in cooperation with Oxfam International, and Sexual Health Exchange is a quarterly newsletter, published in cooperation with SFAids (Zimbabwe). As such, KIT ILS saw these VKCs as possible sources for interesting and relevant articles, case studies and field experiences for the book series and quarterly newsletter respectively.

Seven months were spent on the development of a unique platform for information exchange. Although the Dgroups platform had already been available for some years, KIT ILS decided to design a tailor-made platform in order to provide extra partner services, such as direct access to the KIT database.⁴ One unique aspect of the VKCs, negotiated with Reed Elsevier for a pilot period of one year, was members access, free of charge, to the *ScienceDirect* database, which includes 1800 journals, 6 million articles and 60 million abstracts from all fields of science.

Preparation and pitfalls

During the seven-month preparatory phase, the community platform was developed in cooperation with an e-learning consultancy firm. Whilst developing the terms of reference, it became evident that an e-learning platform is very different from an e-sharing platform - the latter being what the VKCs needed. For example, instant messaging is a proven and popular communication tool for partners in developing countries with limited or difficult access to the Internet, but is not necessarily part of an e-learning tool. Such differences had to be overcome before the envisaged functionality was clear for all parties.

Furthermore, the moderators themselves did most of the determination of functionality, without being in dialogue with the proposed members, whilst the concept of VKCs was new to most of them. In this respect, the VKCs were more supply-driven than demand-responsive.

Finally in June 2004, the objectives for the VKC-pilot were formulated as follows:

- 1) To support professionals in their work:
 - a. To stimulate knowledge sharing,
 - b. To provide up-to-date information;
- 2) To stimulate the use of KIT ILS products and services;
- 3) To experiment with online publishing;
- 4) To gain experience with this digital form of knowledge sharing.

Monitoring and evaluation: the VKCs in detail.

The VKCs were monitored every two weeks, following the website statistics (number of members, actions by individual members, admissions made by members, etc.) and where needed, actions were taken accordingly (extra e-alerts, individual e-mail responses, etc.).

The evaluation was based on the user statistics of the past weeks, on an online survey, on personal interviews with some of the members and the observations of the moderators.⁵

VKCs: themes and objectives

Information Management VKC

The iManagement (information management) virtual knowledge community was started in order to bring KIT ILS's information professionals closer to counterparts in partner institutions in developing countries. The mission of the VKC was:

To provide a forum where members can exchange experiences in the field of information management, and identify issues of common interest. As KIT, we would like to use this forum to build on and intensify our contact with a small number of key partner individuals and institutions, looking at ways in which we can identify common interests and develop joint initiatives in this area.

Participants included information managers and professionals in the field of development information from both the South and the North. The community had 56 members, comprising 40 KIT counterparts and 16 staff members of KIT ILS. For the evaluation, members' opinions were collected using an online survey (n=18) and four telephone interviews. The virtual workspace included a monitoring tool.

Resources posted onto the iManagement VKC

Providing online information services in Makerere University Library, Walter Omona, Institute of Social Research Library, Makerere University, Uganda

The SIDALC-network on agricultural information in Surinam, Jane W.F. Smith, Anton de Kom Library, University of Surinam

Virtual library project of KIT ILS, Tilly Minnée, KIT ILS

Test results KIT Web OPC, Rosemay Ng Kee Kwong, Sugar Industry Research Institute, Mauritius

Challenges of PBL libraries in Mozambique: mission report 2003, Henk van Dam, KIT ILS

Knowledge mapping: a module for the training course IKM Training, Deependra Tandukar, International Centre for Mountain Development, Nepal

Information networking for Ghana's agricultural research and development, Joel Sam, Council for Scientific and Industrial Research

Mauritius Sugar Industry Research Institute Library: a short description of library activities, Sugar Industry Research Institute, Mauritius

HIV/AIDS prevention by information strategies in Francophone Countries, Modou Fall Sall, Information and Documentation Centre, African AIDS Research Network and the Horizons Programme, Population Council

Thank you so much for informing me of the important initiative you are undertaking to create a forum where we can exchange our experiences and identify issues of common interest in the field of information management. I surely would love to be part of that important initiative and look forward to participating actively.

Walter Omona, Makerere University, Uganda

Gender, Society and Development VKC

The objectives of the community Gender, Society & Development (GSD) were:

To contribute to the development of information on women's and gender issues; to stimulate online discussion on information needs in this field; to produce, in cooperation with the members, new information resources, varying from paper and electronic literature lists to thematic publications.

I am a moderator of a Gender group as well (only discussion group). I am very interested and enthusiastic about the GSD VKC. There are many interesting resources. I apologize for the lack of input I have provided. Because I am doing research on Gender & Water, there was not a particular reason to mix in the discussion.

Sara Ahmed, India

62 people were invited to join this community; 38 persons participated. Of these, 18 were authors/editors of earlier editions of the GSD book series. Other members were experts in the field of gender and development, both from the north and south. For the evaluation, members' opinions were collected using an online survey (n=11) and two telephone interviews. Monitoring statistics were generated by the virtual workspace.

Sexual Health Exchange VKC

The objectives of the Sexual Health Exchange (S/HE)virtual knowledge community were:

To provide a forum where readers of Sexual Health Exchange (newsletter) and others can share their experiences with HIV prevention programming and research, giving other people access to their good practices and results. The main objective is allowing others to learn from their successes and failures, and share insights and lessons learned. Relevant resources collected by the well-stocked library of KIT (Royal Tropical Institute) in the Netherlands will also be made available to members. An additional aim is to improve the content and quality of the (newsletter) by making it more interactive and consultative. Readers/members are explicitly asked for their opinions and input on current and forthcoming issues of Sexual Health Exchange. This input could consist of advice on what themes and sub themes could be addressed, suggestions for appropriate authors and relevant programme descriptions, and the submission of articles."

More than 130 persons were invited to join the community, of whom 42 participated. The members were selected from the subscription database of the S/HE newsletter. We identified

Unfortunately, I did not have time to post a message or comment. But I was happy with the information I found at the Documents and I downloaded 4 papers. I have a good internet connection. This is the case for most NGOs in the big cities. In rural areas there is hardly any internet. I will use the VKC more actively in the future and contact other members about their experiences.

Richard Mutakyawa, reproductive health officer, Tanzanian NGO.

people with online connection possibilities, working with NGOs and grassroots organisations, who could provide useful contributions and field experiences for the S/HE newsletter.

For the evaluation, members' opinions were collected using an online survey (n=17) and two telephone interviews. Statistics were generated by the virtual workspace.

The four objectives and their results

Objective	Indicators	iM	GSD	S/HE
1) Providing information professionals in developing countries with information to better carry out their work, stimulate knowledge sharing and provide up-to-date information.	Online Survey (OS): How many respondents indicate they have used information for their work?	13 of 18	8 of 11	15 of 17
	Statistics (Stat): How many messages and information resources were uploaded in comparison with the expected numbers?	Members: 80 instead of 40 Moderators: 147 instead of 80	Members: 30 instead of 40 Moderators: 47 instead of 80	Members: 11 instead of 60 Moderators: 124 instead of 80
2) Introducing the members to different KIT ILS products and services	OS: No. of respondents indicating the use of KIT ILS services i.e. ScienceDirect (SD) or KIT Library Catalogue (LC).	13 (of 18 resp.) found SD very useful. 9 found LC very useful.	3 (of 11 resp.) found SD very useful. 4 found LC very useful.	8 (of 17 resp.) found SD very useful. 11 found LC very useful.
	Stat: No. of visits to ScienceDirect (SD) and Library Catalogue (LC) via VKC	SD: 30 LC: 43	SD: 3 LC: 8	SD: 6 LC: 23
3: Producing an 'output' with the members of the community (online based publishing)*		The iM VKC did not have an existing product yet, as the other VKCs, but was interested to produce a new output such as a special issue of a magazine, a conference or seminar. Further discussion within the community on this topic is planned for 2005.	Expected output: 5 papers for book. Reality: 0 papers for book. Expected: substantial input for discussion on next years theme. Reality: two reactions.	Expected output: 5 suggestions for articles. Reality: 0 suggestion for articles. Expected: substantial input for discussion on theme SHE nr. 1 Reality: two reactions.
4: Gaining experience with online communities and understand wishes/needs of the members	OS: A) Which section of this VKC do you find most useful? B) What kind of information would you like to see in an online community?	A) Experiences' and ScienceDirect (n=13). B) Lessons learned/good practices (n=15) and discussion on topics and online resources (both n=14).	A) Messages (n=9) B) Online information resources (n=10), followed by lessons learned/good practices (n=9).	A) Documents (n=14) B) Printed information resources (n=14)

* KIT ILS thought that the possibility for our members to publish their own articles and experiences in an already established GSD book series or S/HE newsletter, would be very attractive. Furthermore, we were interested in the experiment of using the VKC as a generating tool for articles for these publications.

Evaluation findings

It can be concluded that from the three VKCs, *iM* performed overall as the best. Even in the short period of 20 weeks, there was lively discussion and both moderators and members updated their experiences and cases. One of the reasons might be that information specialists in general are used to (online) communication and information exchange. They can easily find their way in and around an online community, have continuous access to online communication and are inclined to share practical experiences.

The GSD VKC did not perform as expected. Both moderators and members added less information than expected. Two reasons might have played a role. First, the 2005 *Gender Series* book was in an advanced phase of development. Authors had already been asked for submissions and moderators and authors e-mailed outside the VKC. Hence there was no need for the moderators to stress the submission of articles with other community members. Second, the invited community members shared their connection with gender and development, but all had very focuses and research topics within the theme. Thus, there was no clear common ground on which discussions would start.

The S/HE VKC received barely any input from the members, in spite of extensive encouragement by the moderators. One clear conclusion might be that the selected members, almost all working at a grassroots level, hardly had any experience with nor access to online communities. (See also point 2, *Lessons Learned*).

Lessons learned

Although 20 weeks of operation is rather short to find definite reasons for failure or success, a number of factors played a role towards the outcome of the pilot.

1) Thorough preparation and needs assessment is critical

In light of a pilot project, we had decided to introduce a platform with a choice of different information services to support our partners. Furthermore, we had decided after visiting seminars and consulting online information, that the possibility for members to contribute to a printed product would offer them a much sought-after possibility for publication and would motivate them to participate in the discussions. We assumed it would be better to introduce a ready-to-work platform and start consultations with the members about the platform during the pilot period.

After the evaluation, we think however that it might have been better to start discussions with the members in advance, and design the platform and the objectives together with them – even for a pilot project of 20 weeks. The success and thus the continuation of the *iM* VKC, the only VKC where there was a ‘needs assessment’ in advance, confirms this belief. Before the inception of the VKC in its current form, one of the moderators talked the idea through with other information specialist from the north and the south. This led to a common understanding of what the community should more or less look like, what kind of information the partners would like to have and who would like to join. It is thanks to this prior knowledge that the *iM* VKC has been able to respond more effectively to member demand than the other two.

2) Familiarity with online networking catalyses exchange

Familiarity with the phenomenon of online communities and online information resources does play an important role in the success of a community. The persons invited to the *iM* VKC all work in information and relatively resource rich environments. Most of the members are familiar with the use of ICTs and communications via discussion lists and communities.

As a result, they were able to get accustomed to the new platform than members in the other VKCs without this prior experience.

The S/HE VKC consisted mostly of field workers in grassroots organisations. It is likely that this group was not very experienced with virtual communities and online communications. A very typical example is the fact that most of the respondents of the online survey indicated that they were interested in printed material and not in online resources. From this we can conclude that a regular log-on to and participation in online discussion is probably new for most of these members, and is not part of a daily or weekly routine.

3) Community moderation a specialised skill

The moderators themselves also evaluated their role in this pilot project. Their conclusion was that they would have liked better preparation in terms of moderation of their community.

Although moderation is a skill largely acquired 'learning by doing', the moderators' advice to new moderators would be to spend more time in advance analysing the dynamics of a community, to learn more about trust building, identifying members' expectations, clarifying goals, tackling 'lurking', and other issues which are frequently experienced in online communities.

4) Adopt appropriate technology and a suitable platform

Although the platform had many possibilities, the question remains as to whether these options were all useful for the purpose of virtual knowledge communities or was actually better suited to online education. In particular, members experienced some difficulties with up- and downloading of documents and cases. The 'comment' function on messages was not understood very well and had certain disadvantages (for instance, the platform made it possible to comment on a message, but had the disadvantage that the comment was then hidden behind a message). In particular, the members and moderators missed the lack of instant messaging. Therefore, it was decided to move the iManagement community to the Dgroups platform.

Ultimately, we think that a combination of these four factors lies at the basis for failure versus success. We did struggle with the development and operation of the VKCs, and are happy that one of them survived. We are looking forward to the information and knowledge exchanged via this community.

Conclusion

Through a pilot project, KIT ILS wanted to gain experience with online knowledge communities. The experience was very valuable indeed and taught us some interesting lessons which might help to prepare future online learning experiences and assist future moderators with their communities.

We concluded that a needs assessment is very valuable, even for a relatively short-term pilot project. Further, the target group's experience in handling online information exchange is an important success factor, and last, the experiences and ambitions of the moderators themselves need to be taken into account.

Overall, it was beneficial for us to carry out this project. Besides the continuation of the iM VKC, the moderators have gained experience with online communities and most likely will

use this experience to start, in cooperation with partners in the South, new discussion communities. Despite the bumps along the road which led us to learn these lessons, we are convinced that online communities have great potential in our field of work.

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Abstract

This article analyses the development of three online communities, facilitated by KIT Information & Library Services. The development of these communities started in 2003, with the objective to exchange information with partners in developing countries on Information Management, Gender, Society and Development, and Sexual Health. A year later the platform was designed and online operations of the communities could start. After a pilot period of 20 weeks, an evaluation was carried out. This article looks at the objectives behind the launch of these online communities, describes why the development took seven months, and discloses the evaluation results. It concludes with reasons why two of the three communities were closed down, explores whether this could have been prevented and draws the lessons learned from the exercise.

Endnotes

¹ (Cummings 2003)

² KIT Information and Library Services (KIT ILS) is a department of the Royal Tropical Institute (KIT) situated in Amsterdam, the Netherlands. KIT ILS houses one of the largest libraries in Europe on themes in the international development debate.

³ (ILS 2003)

⁴ Dgroups is an online home for groups and communities interested in international development. It is a platform that has purposely been designed as a simple, easy to use tool; it is non-commercial (no ads), respectful of privacy, and targeted at low bandwidth users in the South.