CREATING AND SUSTAINING SUCCESSFUL KNOWLEDGE MANAGEMENT IN PURPOSEFUL COMMUNITIES - SUMMARY OF KEY EXPERIENCES FROM PIONEERS

Lars Albinsson, [1] **Gregory Curtin,** [2] **Olov Forsgren,** [1] **Maria Wall,** [3]
1. Calistoga Springs Research Institute &
School of Business and Informatics
University College of Borås
2. E-Governance Lab
Bedrosian Center on Governance and the Public Enterprise
University of Southern California
3. School of Business and Informatics
University College of Borås

Abstract

Based on research organized as a number of workshops, case studies and interviews with experienced practitioners as well as academics, we present in this report the most important findings on how to create and sustain successful knowledge management in a community environment. The cases, workshops and interviews deal specifically with the Microsoft Solutions Sharing Network program (SSN), but the findings, conclusions and preliminary recommendations can be applied more generally to the development of any knowledge management community.

A key conclusion is that the bulk of efforts toward creating successful knowledge management communities focus on less technical, or softer aspects like leadership, culture, social settings and value of participation. However, these are essential, but not sufficient, ingredients for success. Technical issues, issues regarding development and customization of the tools used to facilitate knowledge management (for example, the SSN web portal), and emerging legal issues surrounding the sharing of intellectual property may be perceived as somewhat less important to the participants, but are nevertheless key factors in the long term success of these communities.

It is also concluded that the foundation for successful collaboration is primarily laid in the initial phases of community development. A community must make a positive impression on its participants from the very beginning because most people won't give it a second chance. In this report we have highlighted three important areas to consider when establishing portals for knowledge management: Leadership, Purpose and Process/Infrastructure.

A *leadership* with high credibility in the subject is needed to lead the participants in the right direction, manage the cultural processes and to make sure that relevant content can be found. Initially it is the content that brings people to a specific community. Thus, there has to be some common *purpose* that not only needs to be in congruence with the professional role of the participants, but also be inspiring for them as well. Additionally, the community should have some sort of *process* that the participants can understand and suits the way they would like to interact. Face-to-face meetings and networking activities create trust which is important to get the process started. Language, IT platform, support and rules governing the contribution, creation and sharing of "knowledge" for the community are other concerns that need to be considered within the process.

Introduction

This paper is based on workshops and a number of interviews on community collaboration and IT support for communities together with the experience of the authors in the development of Microsoft's Solutions Sharing Network communities. The workshops were:

- Solutions Sharing Network EMEA Summit, hosted by Microsoft, Dublin 6-7 June 06 with 30 people with practical experiences from organizing online communities (Organized by the authors)

- Workshop on communities. It took place during ISSS July 2006, at Sonoma State University, CA, USA. There were about 20 people from different fields and nations. (Organized by Ken Bausch and the authors)

- Workshop on successful collaborative partnerships in European R/D programs, Nov 2006, Stockholm. The workshop included 150 mostly experienced practitioners.

- Workshop on collaborative projects, at WM-data Stockholm. 16 Oct 06. 10 people, IS industry people and researchers. (Organized by the authors)

The research is, in a large part, based on feedback from the practitioners at these workshops and the one-on-one interviews conducted throughout the research period. A first version of this document was sent to the interviewees and formed part of the discussions. The interviewees were also encouraged to criticize the findings and make suggestions.

The primary question for discussion at the first three workshops was: "What things do you find most useful in getting a community to engage in a dialogue?" The discussion was organized in rounds where everyone would first present their ideas and then several rounds where people would try to answer the question in the context of practical experiences. In the last workshop we focused on collaborative communities for IT – examining developments in companies and organizations.

Our research approach in this report has been design oriented – the task was to create a useful model of how to run and participate in purposeful communities.

At the end of this report we have provided some future oriented reflections of the use of this study and also the future development of Knowledge Management portals.

We have included a number of quotes from the interviews to illustrate the main points.

This report has been funded by Microsoft and the authors wish to thank Jonny Chambers for his support and valuable input.

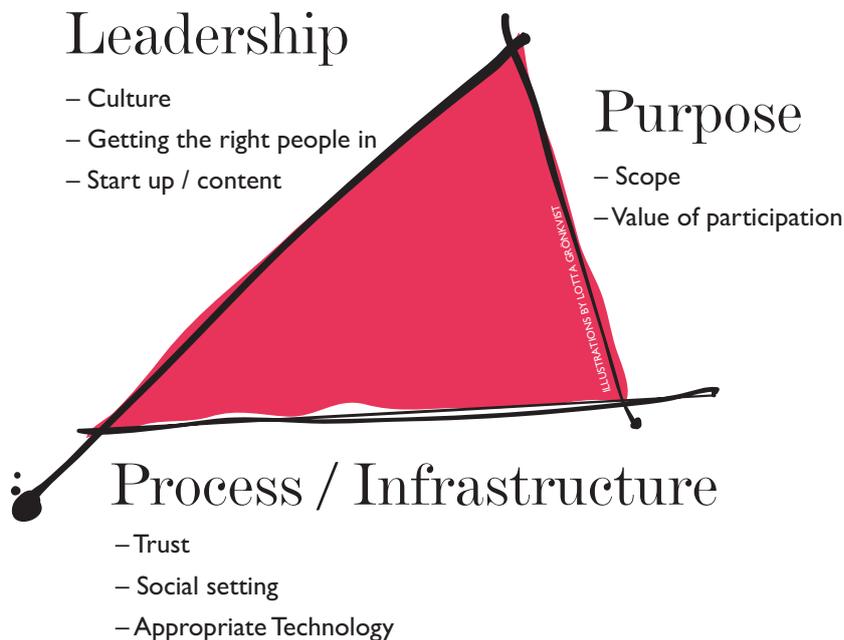**From projects and discussion groups to purposeful communities**

One reason why communities currently are on the agenda of many organizations is that projects today often include multiple organizations. This makes it difficult to control projects in the traditional way, since the responsibility for deliverables is spread out among many parties. Many projects may therefore be regarded as "purposeful communities."

On the other hand many online communities have moved from basic chat rooms and online forums to having as well defined goals and processes as projects.

Is this a purposeful community or is it just another project?

ILLUSTRATIONS BY LOTTA GRÖNKVIST

It seems that both these trends merge together in what we here call "purposeful communities", the focus of this study. As we will describe more fully later in this paper, communities are living things that are developing continuously. This community development process is complex but virtually all the community members and observers who participated in this research identified a core set of elements that are crucial for success.

Success factors: The Community Triangle

Leadership
– Culture
– Getting the right people in
– Start up / content

Purpose
– Scope
– Value of participation

ILLUSTRATIONS BY LOTTA GRÖNKVIST

Process / Infrastructure
– Trust
– Social setting
– Appropriate Technology

The Community Triangle: Three important considerations for making a community work

This model is our attempt to summarize the most important success factors as identified by the participants. We have found that almost all factors given by the participants fall into one or two of the three categories. There are of course other possible models. This one is designed to be of practical use to people trying to form and manage a successful knowledge sharing community.

It is a general comment from almost all people that have been involved in this study that:

"A model like this would have been very helpful for us when we first established our SSN Portal. It covers many years of experience!"
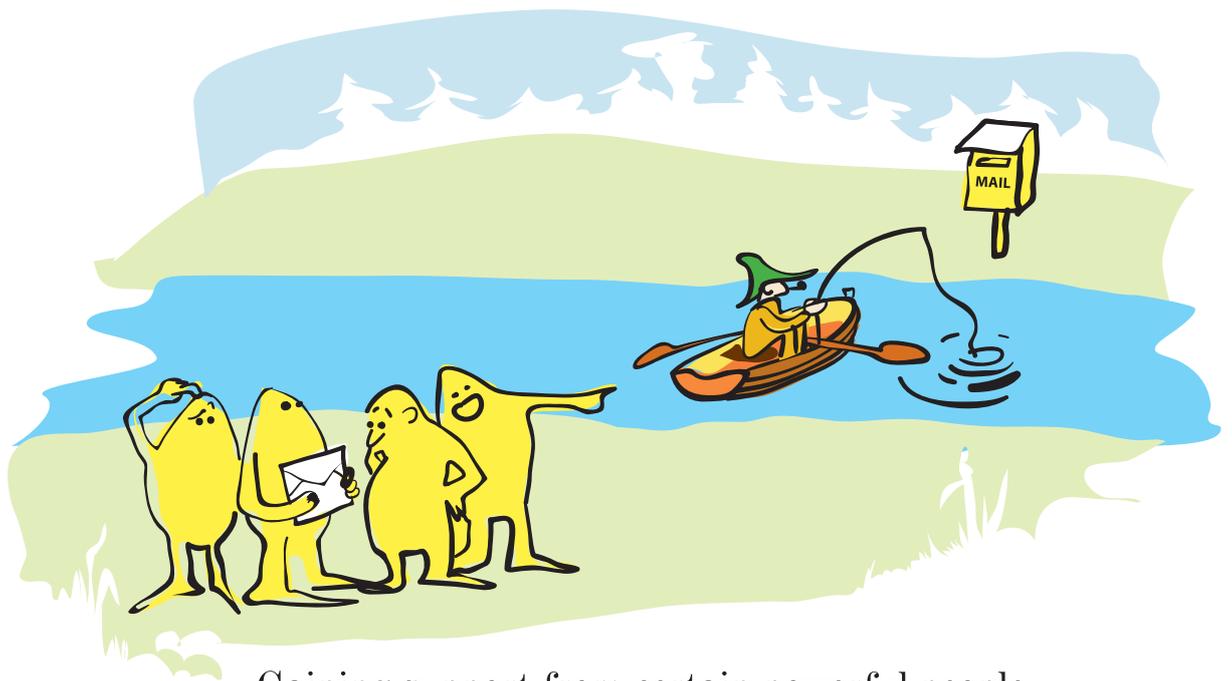
Community Leadership

"You can lead a horse to the water, but you cannot force him to drink". A leader is needed in every community to lead the people in the right direction and make sure that there is fresh water to drink (content)".

Few communities seem to survive without a person who enthusiastically leads the process. This role can span from classic facilitation, where the person just focuses on helping the participants forward in the dialogue, to a more engaged role where the person is more like a creative director or *maestro* taking an active part in shaping the outcomes. This was also a key discussion topic on innovation projects at WM-data. The conclusion was that a *maestro* (McKenney, Copeland et al. 1995) type of person is needed to manage the innovation process. The style of leadership is therefore connected with the community's purpose.

Part of the leadership function is *getting the right people on board*. In many cases there are individuals that have useful experiences that are worth sharing broadly, if they only

can be brought into the process. Of course, a great way to do this is to have people share experiences using an IT platform. Indeed many major consulting firms are constantly adding to their internal "case databases" where important experiences from many projects become an extremely valuable intellectual property asset for future work.

There is also the question of engaging people influential to the purpose of the community. If the community is trying to have some impact it may be necessary to gain support from certain powerful people. Understanding this and getting the community to work in this direction may also be a key issue for the leadership.

Gaining support from certain powerful people might make your impact bigger.

Good community leaders have knowledge in the specific area, but they do not need to be experts; rather, they have networking skills, know the participants and are well respected as leaders. Depending on the type of role the leadership takes on, s/he can also be a driver of shaping the purpose of the community.

It is important that the leadership responsibilities are not laid on top of other tasks. Leaders who are specifically employed for the community and/or are full time tend to put more efforts in the tasks.

"There needs to be one person with the role of owner/coordinator/manager/driving force for each community - without this person everything will fail."

Start up/content
A community needs to have a considerable impact on its participants from the very beginning. Consequently, releasing an incomplete community with no content could be very damaging. Most people will not give it a second chance. Thus, the Leadership will play its most important role at the start up of the community. No one will come to and put information into an empty community. He or she should initiate and encourage

discussions and give each community of practice *momentum*. The leadership should have commitment to ongoing and continual improvement of all aspects of the community. It is essential that somebody from time to time injects new thinking, ideas and concepts for the participants to consider.
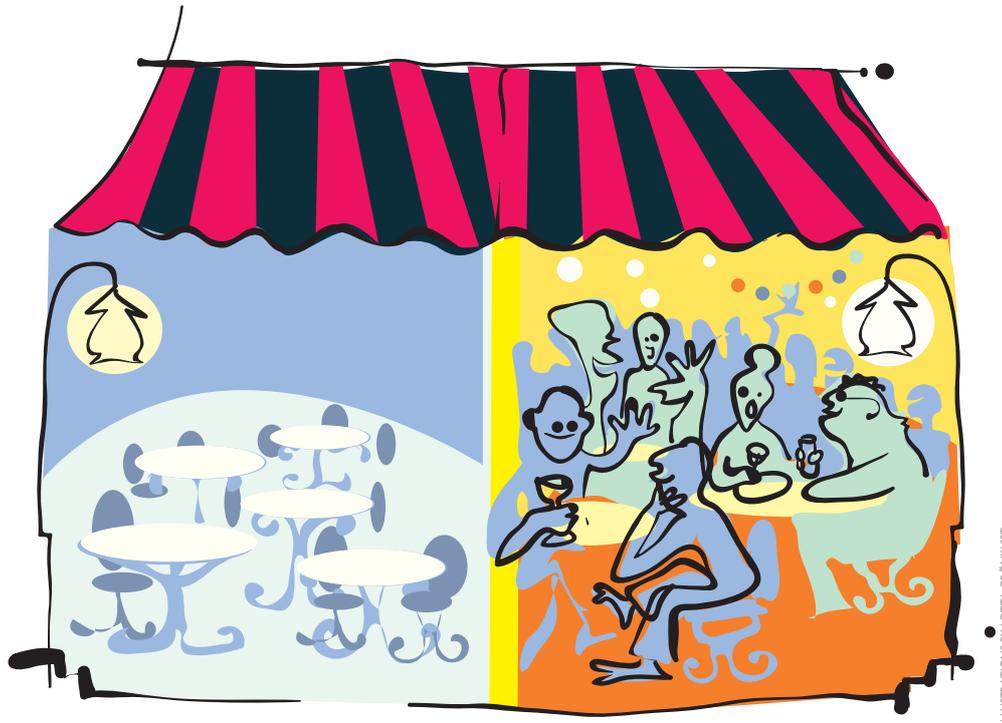
No one will come to and put information
into an empty community.

"There has to be some kind of initial structure. You must put content in there - some suggestive answers around some widespread problems."

Getting the right people in
At the top of a community there are often a handful of people, whom are both committed and experienced in the subject of the community issues, and really contribute in a big way both with content and culture. Getting these types of people on board is an important factor in the establishment of the community. All communities also have a life, they can have an intense start and then a slowing down in activity, but there are also examples of the opposite. In all cases it is important to have a leadership that is able to put more fire in when needed or in some cases, cool down the community.

A leader that can make sure that the RIGHT people are there…

In some of our interviews there has been a claim that around 60 people is a maximum limit for effective exchange of knowledge and experiences. Most of our research says that this cannot be a fixed number, it depends on the scenario. Often communities have a layer structure varying over time with a core team, members and visitors.

"- a leader is needed to manage the content and the people – to make sure that the right people are there"

Culture
Culture has a very significant impact on the views of community participants, and their willingness to contribute. Culture can be the main barrier to sharing; hence the cultural processes must be managed. Culture will be most visible in the *process* of the community and the quality of a sharing culture is attributed to this. The main approach in fostering a sharing culture is to build trust. Historically, knowledge has often been regarded as power - if you share your knowledge you simultaneously lose your power. Nevertheless, environmental factors like the government legislation and the need for financial savings impacts the culture because it makes people accept that they have to open up; it is too expensive to develop on your own so you are compelled to find other solutions. The feeling of being a part of a greater social entity also drives people to participate and contribute with content into the community (Figallo, 1998).

"-you don't want to share stuff with people unless you almost know it is safe. Somebody else might have done it better or they might judge me negatively so I'd rather just share with people I already know"

The statement shows that there are multiple concerns involved in nurturing a sharing culture. To share is also to open up for criticism and in a worst case, your contribution can be used against your best interests. It is hard work to make participants switch from looking at sharing as a burden to sharing as an investment, but as community leaders or establishers you could set a good example by using the community yourselves and visualize the value. Be patient – sharing must be made a natural part of the daily work

and that will take some time. According to Anderson et al. (2006) it may take up to ten years before a collaboration partnership is totally established.

Purpose

At all workshops the importance of purpose was stressed. Even if all participants have their own agendas, there has to be some common purpose to form the community around. This purpose needs not only be aligned with the professional role of the participants, but also be inspiring for them as well. A challenge or a triggering question can serve as a purpose. The common understanding of this purpose is a key factor in getting energy and resources into the community. In more project-based communities there is much research showing the importance of a well communicated purpose. Depending on how heterogeneous the community is, communication of the purpose and discussions on it may require rather advanced skills.

Of course, the type of purpose will affect the other parts of the Triangle. A community that comes together to discuss the merits of building a road bridge in local village requires quite different leadership and processes than an EU funded research project aiming at developing a new type of e-service with universities, councils and companies in 10 different countries.

It is important to communicate the purpose of a community.

"When it comes to new contributors the leadership should make sure that they get the message on what the community is all about."

Initially the following questions should be considered:

- What do I want from the community?
- What do I want to share/give to others?
- Who could have the same needs and motives?

Primarily a clear main purpose should be defined and as the community develops the purpose can be expanded to include new areas.

Scope
If the community should last for a long time it is important that the issues that are being addressed have a big enough scope.

"The end should never be perfectly clear - people should continually solve new problems. We must remember not to have issues that are completely addressable – people must feel like they can make steps towards addressing these issues. You should not have question that is too difficult like "what is the meaning of life?" People must feel like they can at least get close to what the answer is. "

Value of participation
Knowledge Sharing is still a new cultural phenomenon; in many places around the world people are not used to the notion and value of sharing. The value of participation will probably evolve during the development, and the full value may not be apparent until later in the community evolution. Still, contributors must know that something will happen with the content they are producing. They don't have to have an absolutely clear purpose, but they have to know what they are contributing to. Without quick response and credits for participation the motivation for sharing will soon disappear.


Knowledge Sharing = Contributors must know that something will happen with the content they are producing…

ILLUSTRATIONS BY LOTTA GRÖNKVIST
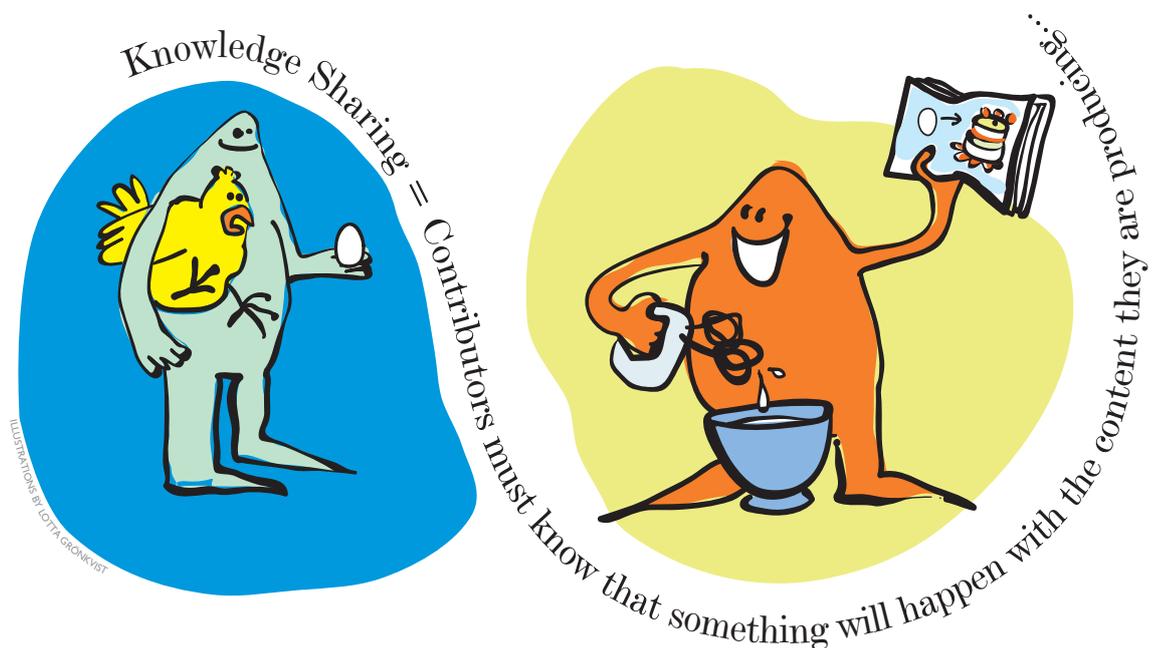
"You also have to know that something will actually happen with that content and that you will get credit for it."

Process/Infrastructure

The community should have some sort of process that the participants can understand and that suits the way they would like to interact. This process must also appear as safe, ranging from, for instance, guaranteeing participants to be anonymous in case of politically sensitive discussion to ensuring that important intellectual property is not stolen. The culture of the community is implemented in its process.

Language is a key consideration within many communities. This applies to not only the mother tongue of the participants but also whether to use specialized language, jargon, etc. Even further, the choice of media and form is important. Should the discussion take place in virtual meetings, in huge text documents or in the form of animations demonstrating propositions?

"Even if we all speak English we come from different cultures. We often think that we understand each other – but we don't."
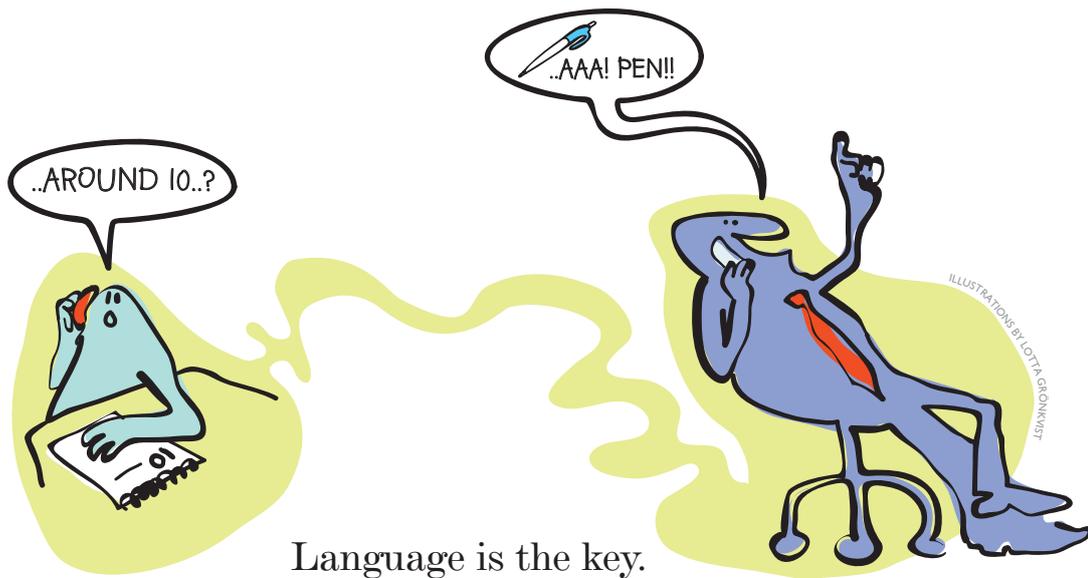
Language is the key.

Most of the communities presented as examples in the workshops had some kind of IT support. Having a suitable IT platform is regarded as extremely valuable. There is however always a need for helping participants in getting started using it. There are many examples were of communities that failed because there was no good support for getting started.

The process should also be designed with respect to the purpose as well as supporting discussions on the purpose itself. Particularly in the case of communities and projects dealing with new innovations, the result is often unknown at the outset and the process has to encompass the definition of the results and goals.

A process that makes it easy and comfortable for the necessary participants is a vital key to success.

Trust
Participants must respect each other and feel that they are among friends. They must feel safe and that the information they are sharing there won't be criticized or their questions derided.

You don't want to share stuff with people unless you know that it is safe...
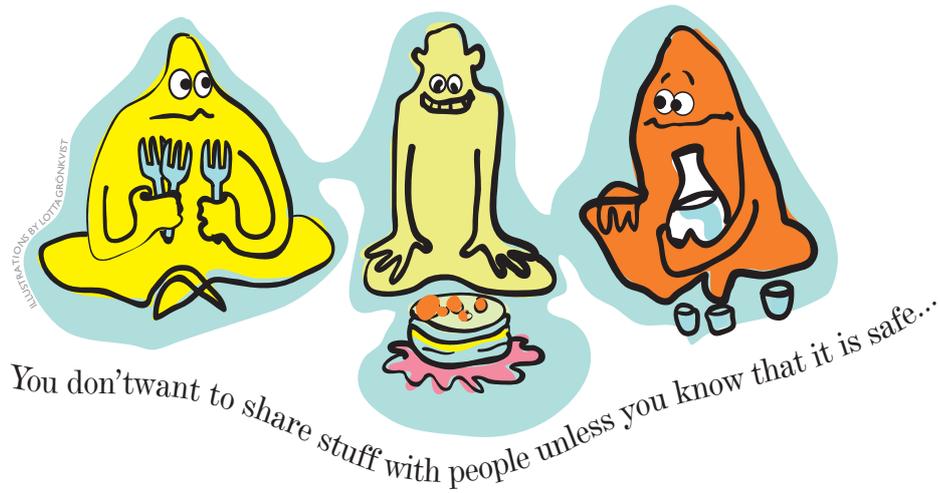
"Participants must feel safe and that the stuff they are throwing out there won't be criticized." "You are more likely to Trust somebody if you have met face-to-face and shaken their hand."

Social setting

Having actually met is often pointed out as being critical to making sharing happen...
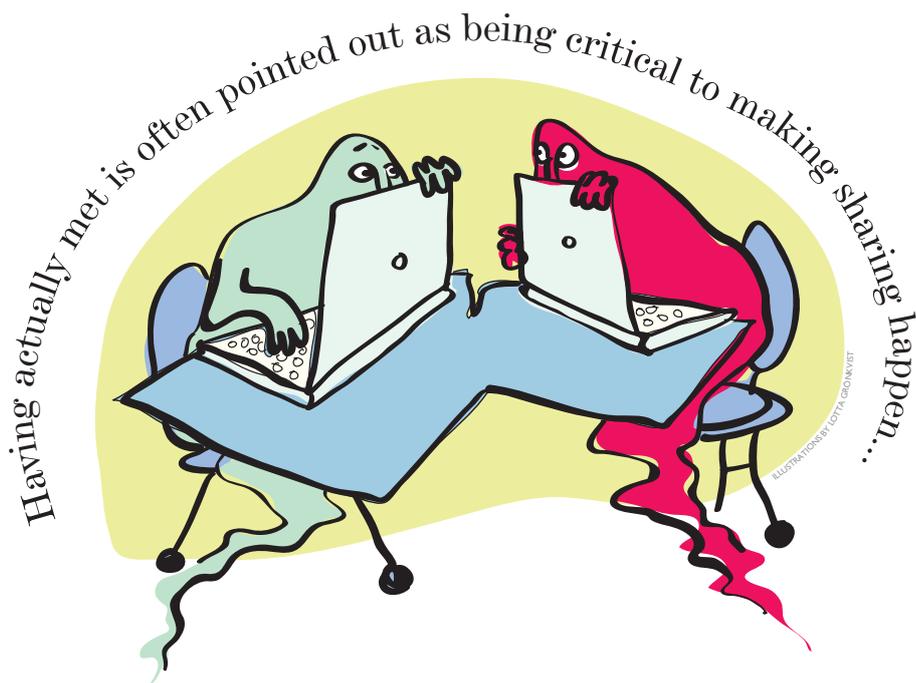
Having actually met is often pointed out as being critical to making sharing happen. If people don't know who is in the community and they haven't met each other face-to-face, it is difficult to build the trust that is needed to get the process started. It's very strongly recommended that actual meetings are part of the process, organized in a setting that allows people to get to know each also informally and personally.

"Networking is one thing you can't overemphasize - that's such a huge factor for us."

Appropriate technology
A good technical platform can make good communities better and a bad platform can make bad communities even worse. As participants often come from different

organizational backgrounds and with different skills ease of use is a major issue. Also the technology should have low barriers of entry. Participants trying the platform out for the first time, need to feel encouraged and successful in doing so, otherwise there is a risk they will never return.

Have a suitable IT-platform is regarded as extreamly valuable.
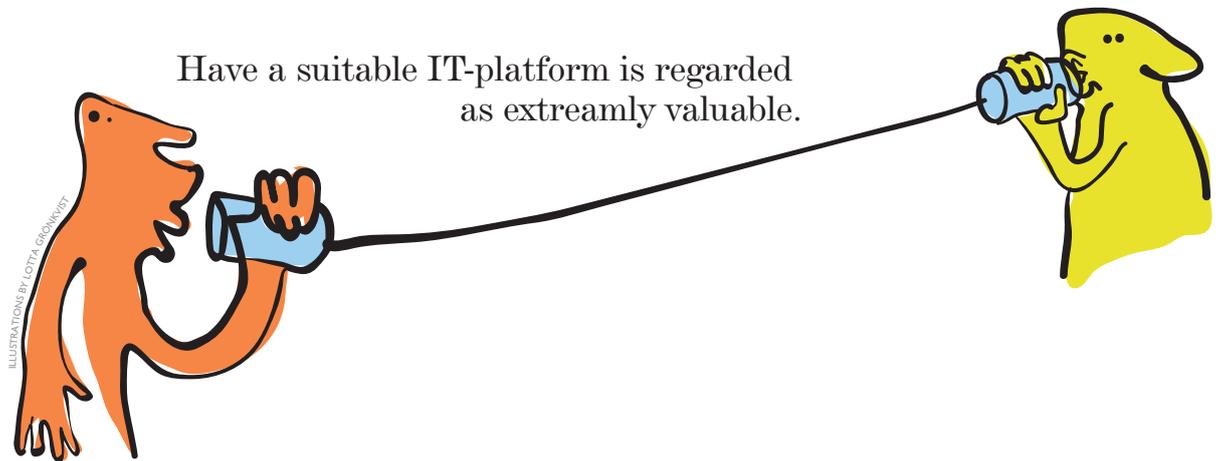
"A blocker in the past is the actual technology and the platform itself."

Rules & Legality

The legal issues surrounding knowledge management communities, especially online knowledge management communities, are many, and often well beyond the scope or expertise of the core community participants. Central to the legal issues is the nature of "sharing" in knowledge management communities. By definition content, products, services, information, knowledge, and so on—all of which have some inherent, real or perceived value—are being shared and potentially enhanced to create new and more valuable content, products, services, information, knowledge and so forth. In the real world, this "value" chain has to be accounted for and managed; otherwise some very real legal implications may arise. Thus, the very purpose of knowledge management communities brings with it inherent risks. Hence, at the very least there should be some agreed upon rules within communities, and depending on the scope of the community and its purpose, a legal framework may have to be identified and/or developed to ensure the long term success of the community.

The legal issues related to knowledge management communities tend to fall into one of three major classes:

1. Intellectual property (IP) issues including ownership, usage, and current/future rights;

2. Legal liability issues stemming from the possible outcomes and consequences of community "sharing" processes; and

3. Legal structural issues related to the proper alignment of policy, regulatory and legal frameworks and institutions.

Taking the primary legal issues into account, there are a number of possible models for formal knowledge sharing the public sector, with the assumption that "knowledge" here can and often does constitute legitimate IP. Note that these models are not mutually exclusive, and in fact there are different ways to define and differentiate them. However, for the purposes of this paper, and the target audience of primarily non-legal practitioners, the approach outlined below is a good starting point and should serve as a useful tool in decision making. The following table presents these IP sharing models, and assesses their possible impacts on the community in terms of People, Purpose and Process—our Community Triangle Model. Each community must determine which one or combination of the models will work best given individual community circumstances and goals, and then shape that model to best meet the community's needs.

IP Sharing Models and Impacts on the Community Triangle

IP Sharing Model	Impact on People	Impact on Purpose	Impact on Process
a. Gift for reuse	• Does not necessarily require technical expertise within the community	• May limit IP to community members only • Good, easy initial content contribution	• Simple rules sufficient • Threshold for trust • May require technical validation
b. Co-development: Government and industry	• Requires /encourages collaboration • Requires some technical expertise within community	• May encourage private sector culture (positive or negative)	• Difficult/ complex • Requires formal legal rules • Builds trust between entities • Can possibly create conflicts of interest (real or perceived)
c. Co-development: Government and government	• Requires high degree of collaboration • Requires technical expertise, but not necessarily within the community	• Can encourage innovation • Can create true "public service" value and outcomes	• Difficult, but not too complex if limited to similar governmental entities • Requires formal legal rules • Builds trust between entities

IP Sharing Model	Impact on People	Impact on Purpose	Impact on Process
d. Community development	• Highest level of collaboration required • High level of leadership required • Requires technical and managerial expertise across/within community	• Benefit all members of community • Possible external sharing benefits • Encourages innovation Can create true "public service" value and outcomes	• Simple rules if benefits limited to community members; may require more complex rules if benefits available to non-community members
e. Shared source	• "Source" as possible initial content contribution • May not require technical expertise within community • May not encourage collaboration	• Encourages innovation • May not benefit community unless a specific part of the process/culture	• May require formal rules • Some risk management required
f. Export: share outside of legal/political/geographical areas	• Requires individuals outside of the community • Strong, visionary leadership	• Scope requires reach and cooperation outside of community • Can create some higher level of broad, common purpose and goals	• Complex— requires formal rules and protections • High level of risk management • Higher risks and rewards related to public relations
g. One to one license	• Possible IP as initial content • Low level of collaboration	• Limited scope and community benefits	• Predetermined rules • Easy to implement, facilitate
h. Representative or Master licensing	• Possible IP as initial content • Requires high level of leadership	• Community resource benefits • Little or no innovation	• Predetermined rules • Easy to implement, facilitate
i. Internal (stand-alone) development agency	• Requires technical and managerial expertise within community • High level of leadership	• Requires additional resources to create new agency within the community • Scope may include innovation • May not encourage collaboration	• Possibly simple rules, especially if benefits limited to community members

IP Sharing Model	Impact on People	Impact on Purpose	Impact on Process
j. Collaborative/ consortium/ clearinghouse	• Requires high level of leadership • May require technical expertise	• Community and individual benefits • Benefits can be extended beyond one community • Can include innovation as a purpose Requires additional resources to sustain and/or expand	• Complex rules • May require alignment with multiple legal structures • Requires risk management • Technical validation process may be required

Some final reflections about the future of Knowledge Management and Communities

It is our strong belief that the intellectual world is shifting from thinking of knowledge as more or less exact depictions of reality into a mood of thinking of knowledge as more or less useful views or solutions - impacting different stakeholders in different ways. In this new mood of thinking, programs such as the Solutions Sharing Network will be a driver of knowledge generation and reuse. We can see many signs of this now. One is the rapidly rising interest for CWE (Collaborative Work Environments) and co-laboratories in both Industries and research (Forsgren, Rowe et al. 2005). In the same line of development we can see people beginning to add more and more perspectives when designing their life style. Environmental concerns, social responsibility in a global world, the needs of their own families and so forth. Purposeful communities are becoming increasingly necessary and valuable on both an organizational level (companies, governments, organizations) and on a personal level (individuals, families, groups). Today, communities in an organizational context are still regarded as somewhat new and interesting phenomena, as a vehicle for development. Given the current social and economic development occurring across the globe, it is possible to imagine a future where communities *are* the main organizational form. There are many indications of such a development, representing a rich subject are for ongoing study and research.

A scenario that may help in driving innovation may be constructed from these observations. A future where people are members of several communities, some loose and open while others closed with memberships taking the same role as company stock and real estate. As a person you are involved in a range of purposeful communities, including some in which you are paid to contribute, some in which you may have to pay to participate, and others which require and provide different types of value measured in non-monetary ways.

References

Albinsson, L., O. Forsgren, et al. (2006). *Public e-services: A Value Model and Trends Based on a Survey*, VINNOVA.

Andersson, M, Svensson, L, Wistus, S & Åberg C et al. (2006) *On the Art of Developing Partnerships*, Arbetslivsinstitutet. Sweden.

Figallo, C. (1998). *Hosting Web Communities: Building relationships, increasing customer loyalty, and maintaining a competitive edge*. NY: John Wiley & Sons, Inc.

Forsgren, O., Rowe, D., Sonnenwald, D. (2005). *Promoting a pan-European Network of Local and Regional Government e-Services Co-design*, IOS Press, 2005 Amsterdam.

McKenney, J. L., D. C. Copeland, Mason, R. (1995). *Waves of change: business evolution through information technology*. Boston, Mass., Harvard Business School Press.

Illustrations by Lotta Grönkvist (lotta@maestro.se)