

Events:

Innovation Book Club

Book: "One" by Lance Secretan

Facilitator: Professional business coach and local entrepreneur Ray Savage

12 week program running February 15- May 3

Kings CED Upstairs Boardroom, 35 Webster Street, 2nd side door

Cost \$50.00 for entire program.

Coffee and snacks provided.

To register reply to Marianne Gates, marianne@kingsced.ns.ca, 678-0393

Limited numbers of seats available so please register early to avoid disappointment!

Deadline February 7, 2007.

When registering please indicate your preferred time:

Thursday at either 7:00am-8:00am or 8:00am-9:00 am

(Decision based on majority.)

Quote:

"I have yet to find the man however exalted in his station, who did not do better work and put forth greater effort under a spirit of approval than under a spirit of criticism."

Charles Schwab

Interesting Website:

<http://www.cpsquare.org/>

Feature

Communities of practice and organizational performance

by E. L. Lesser and J. Storck

As organizations grow in size, geographical scope, and complexity, it is increasingly apparent that sponsorship and support of communities of practice—groups whose members regularly engage in sharing and learning, based on common interests—can improve organizational performance. Although many authors assert that communities of practice create organizational value, there has been relatively little systematic study of the linkage between community outcomes and the underlying social mechanisms that are at work. To build an understanding of how communities of practice create organizational value, we suggest thinking of a community as an engine for the development of social capital. We argue that the social capital resident in communities of practice leads to behavioral changes, which in turn positively influence business performance. We identify four specific performance outcomes associated with the

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communities of practice we studied and link these outcomes to the basic dimensions of social capital. These dimensions include connections among practitioners who may or may not be co-located, relationships that build a sense of trust and mutual obligation, and a common language and context that can be shared by community members. Our conclusions are based on a study of seven organizations where communities of practice are acknowledged to be creating value.

Example

Steve walked into the meeting room and quickly grabbed a seat. Having just recently joined the company, his boss had recommended that he attend this weekly lunchtime meeting of programmers. He felt it was a good way for Steve to get “plugged into” the company, and would give him an opportunity to see some of the projects that others, across the firm, were working on.

The meeting began with a series of short introductions around the table. Then, one of the senior designers, Cindy, plugged a laptop into the overhead projector and started demonstrating a new set of programming tools that had been developed by one of the company's strategic partners. Steve took notice of the extended functionality of some of the tools, and saw an opportunity to use it on one of the new projects he would be spending time on. At the end of the meeting, Steve walked up to Cindy and introduced himself. They spent another 20 minutes discussing the opportunity to use the tools on Steve's project and how Steve might be able to also use some existing code from one of Cindy's recent development efforts. After writing down Cindy's contact information on a napkin, he headed back to his office, thinking about this new course of action.

As organizations grow in size, geographical scope, and complexity, it is increasingly apparent that sponsorship and support of groups such as the one described above is a strategy to improve organizational performance. This kind of group has become known as a community of practice (CoP)—a group whose members regularly engage in sharing and learning, based on their common interests. One might think of a community of practice as a group of people playing in a field defined by the domain of skills and techniques over which the members of the group interact. Being on the field provides members with a sense of identity—both in the individual sense and in a contextual sense, that is, how the individual relates to the community as a whole.¹ A sense of identity is important because it determines how an individual directs his or her attention.² What one pays attention to is, in turn, a primary factor in learning.

Therefore, identity shapes the learning process. The relationships within the community are enacted on the field, which provides an initial set of boundaries on the interactions among its members and on their goals. And, as with most field-based games, overall community welfare ultimately is more important than individual goals. The playing field analogy is imperfect, however, for two reasons. First, in the “game” played on the field, the number of “players” is indeterminate. In fact, being able to maintain the community by bringing new members onto the field—like the fictional programmer in the vignette above—is an important defining characteristic. New members build legitimacy through participating in learning interactions with other members of the community. The nature of participation must be engaging, although there is clearly room for what is called legitimate peripheral participation.² Indeed, peripheral members bringing new ideas can catalyze innovation. One usually thinks of face-to-face communication as the way that members of a community achieve the necessary level of engagement to develop their identities, relationships, and learn. In

fact, most prior studies of the ways that people engage with each other have focused primarily on face-to-face communication. Nevertheless, there is nothing in the classical sociological definition of community of practice that rules out communication media such as e-mail, discussion groups, or chat rooms as support mechanisms for participating in distributed communities of practice.³

The second problem with the playing field analogy is that it can lead to thinking about communities as large, unstructured teams. The distinction between communities and teams sometimes leads to confusion. Storck and Hill⁴ suggest that the differences between the two constructs can be characterized as follows:

1. Team relationships are established when the organization assigns people to be team members. Community relationships are formed around practice.
2. Similarly, authority relationships within the team are organizationally determined. Authority relationships in a community of practice emerge through interaction around expertise.
3. Teams have goals, which are often established by people not on the team. Communities are only responsible to their members.
4. Teams rely on work and reporting processes that are organizationally defined. Communities develop their own processes.

Others tie the difference between teams and communities to the legitimizing process. In a team, legitimizing occurs principally through the assignment of formal roles and relationships (i.e., team membership and structure are defined external to the team). As indicated above, members of a community of practice establish their legitimacy through interaction about their practice.³

Communities of practice have previously been thought of as coming into existence when people interested in a common work-related area or in an avocation feel a need to share what they know and to learn from others. Professional associations, groups of software developers, and skilled craft guilds are examples of work-related communities of practice. Avocational examples range from communities of quilters to communities of rowers. In the past few years e-mail, electronic discussion groups, and electronic chat rooms have facilitated the development of communities of practice whose members are not all colocated. Regardless of the mode of interaction, the traditional notion of a community of practice is that it emerges from a work-related or interest-related field and that its members volunteer to join.⁵

In some organizations, the communities themselves are becoming recognized as valuable organizational assets. Whereas the value was previously seen as being relevant primarily to the individual members of a community, it is often now recognized that benefits can also accrue to the organization itself. Acknowledging that communities of practice affect performance is important in part because of their potential to overcome the inherent problems of a slow-moving traditional hierarchy in a fast-moving virtual economy. Communities also appear to be an effective way for organizations to handle unstructured problems and to share knowledge outside of the traditional structural boundaries. In addition, the community concept is acknowledged to be a means of developing and maintaining long-term organizational memory. These outcomes are an important, yet often unrecognized, supplement to the value that individual members of a community obtain in the form of enriched learning and higher motivation to apply what they learn.

Linking communities of practice and organizational performance

As part of our research, the community members in our study suggested a number of different mechanisms in which communities of practice influenced business outcomes.

Although many of these were tied to the specific business environment that each of the communities operated within, our analysis highlighted four areas of organizational performance that were impacted by the ongoing activities of communities of practice.

These included:

- Decreasing the learning curve of new employees
- Responding more rapidly to customer needs and inquiries
- Reducing rework and preventing “reinvention of the wheel”
- Spawning new ideas for products and services

Decreasing the learning curve of new employees. A common challenge faced by many companies is the need to rapidly increase the productivity of new employees. As employee mobility continues to increase across organizations, the ability to quickly assimilate individuals into the methods, tools, and activities of a new position represents an important capability. This task becomes especially important in dispersed organizations where an employee's direct supervisor may be located across town, or in a different country altogether. In the companies that we examined, communities of practice enabled new practitioners to “get wired” into the organizational memory and made it easier to learn both the technical and cultural aspects of their new roles and responsibilities.

In our sample, we found that communities of practice were quite valuable in helping newcomers identify subject matter experts who could answer questions and guide them to resources within the organization. Within a community of practice, new employees were able to make the connections that allowed them to identify a number of people with the same or similar work activities and answer questions about their new position. As one project manager in telecommunications explained,

It's useful for the new graduates coming in to ask a question about something that they might be unsure about ... They will get a response to it that will help them out.

In addition to simply helping new people identify and locate experts, communities fostered relationships between newer, more junior employees and established practitioners within the organization. These relationships became important for a number of reasons. Community membership appeared to serve as a screening mechanism by senior employees who were limited in the amount of time they could assist new practitioners. As one new community member in the telecommunications company stated,

I feel more comfortable calling on them [more senior practitioners]. They know me more because they have seen my face; they know who I am. They know me as part of the community so they identify me ... Originally, they wouldn't necessarily pay me the same attention.

Further, the community helped foster the development of mentor-mentee relationships that could be valuable for both parties. Through community events and interactions, new employees were able to seek out more experienced practitioners that could provide them with insights and guide them in their career development. One of the senior community members within the multinational lending institution noted the importance of mentoring relationships within the community:

It [the community] certainly has given me the opportunity to share some of what I have at this stage in my career. There are a lot of new entrants to the work force that are coming in and working on this, and being able to have a way of registering institutional memory on this particular topic is critical ... The community has been doing a lot of mentoring. We're trying to do that more and more.

Another challenge faced by new employees is to understand the larger context in which they perform their day-to-day tasks. Being new to an organization, it is often difficult to understand how individual activities impact other individuals and processes.

According to several of the individuals we interviewed in the study, communities helped individuals gain a broader perspective on their specific roles. One of the researchers in the specialty chemical company provided a description of this phenomenon:

[The community] ... is dealing with a lot of people working on different parts of a large problem, so you come to understand and you have more perspective as a result. You can look at how individual tasks really fit in with everything else, and start to reinforce that whole way of thinking.

Finally, communities were seen as useful vehicles for creating shared narratives that could be used to transfer tacit knowledge. As Nahapiet and Ghoshal stated, “... myths, stories and metaphors also provide powerful means in communities for creating, exchanging and preserving rich sets of meanings—a view long held by some social anthropologists” (Reference 22, p. 253). Through the use of training courses, internal conferences, and mentoring relationships, new community members were able to hear and exchange useful tips and anecdotes that were not located in any community archive. As one of the specialists in the multinational lending institution indicated, *The opportunity to have a point where you can go into depth in one thing and share that with your colleagues across regions is critical. In the days when we were just starting this [evaluation of urban services], those of us that are here now were a very small group working on similar projects. We had a chance to get together to talk and exchange every day, or at least every week. That's how we learned. The community is giving us that opportunity again.*

Responding more rapidly to customer needs and inquiries. In an era where both prospective and existing customers are expecting rapid answers to inquiries, communities of practice can play an important role in quickly transferring the knowledge necessary to address customer issues. From a connection perspective, communities can help individuals rapidly identify an individual with the subject matter expertise necessary to provide the best answer to a client problem. This is especially true in organizations where the expertise needed to solve a particular client problem may be separated by time zones, distance, and/or organizational boundaries. For example, in the specialty chemical company that we examined, technical support personnel were able to tap into a community of researchers through the use of discussion boards to identify individuals who may have encountered similar problems in other customer locations. This ability to rapidly identify and locate individuals with particular knowledge was considered to be a significant source of competitive differentiation in the marketplace.

Also, as many communities maintained some form of centralized electronic repository, the reuse of intellectual capital located in a common location made it easier to find valuable explicit knowledge that could be used to respond to a customer need. The material in this type of repository included marketing presentations, proposals developed for previous prospects, and implementation plans that had been created from similar types of projects. An example of this is provided by one of the project managers within the telecommunications firm:

Because we can find out what happened in the past much quicker, the community helps us to deliver solutions to the customer a lot better and give customers better information. Also, if there are issues or concerns coming up, we can let the customer know in advance and make arrangements to start work on different solutions.

Reducing rework and preventing “reinvention of the wheel.” Perhaps the most valuable contribution that communities of practice can make to a sponsoring organization is the ability for members to more easily reuse existing knowledge assets. Given the aging of the workforce population and the increased worker mobility that has been witnessed within the United States over the last several years, the need to retain

“organizational memory” has become ever more important. For example, a recent survey conducted by the International Data Corporation suggests that the annual cost of this “knowledge deficit,” which includes costs and inefficiencies that result from intellectual rework, substandard performance, and inability to find knowledge resources, will grow to over \$5,500 per worker per year.²³

Virtually all of the communities within the study cited the ability to locate, access, and apply existing intellectual capital to new situations as an important result of community participation. As several community members stated:

For starters, the community means you get your work done more quickly ... If you've got to start from scratch to put that documentation together, it's going to take you longer. If you've got somewhere that you can go to where you've got a template that says that this particular product fits, it helps you. [Project Manager at a telecommunications company]

It's the fact that we don't have to reinvent the wheel all the time. If we're sharing our information, then I can use what somebody else has learned and work on it somewhere else, instead of spending 80 hours doing it myself. It not just saves time, but it has improved the effectiveness of people's delivery material. [Quality Champion at a manufacturing company]

The repository systems that were used by many of the communities served a number of important functions. First, they provided a common virtual work space, where members could store, organize, and download presentations, tools, and other materials that community members could find valuable. What was of equal value, however, was the presence of meta-data that enabled the individual to identify and locate the author of the document. Given the difficulty in automatically reusing a piece of intellectual capital without knowledge of the situational context in which it was developed, the added ability to contact the developer was very important to community members. Further, the attachment of a community member's name to a particular piece of explicit knowledge in a repository served to reinforce the potential value of the content. As one of the project managers in the telecommunications company stated, “You are believing that someone who is answering [an inquiry] is answering it because they believe they know they have either that experience or they believe it is correct.”

Also, we found that virtually all of the repositories incorporated some form of human moderation. Often, the community used content managers, or teams, to ensure that the content within the repository remained fresh and relevant to the users. Often these content managers also served to connect individuals not only to the original author of a particular document, but to other individuals who might be able to provide insight on a particular problem.

Repositories not only were used as storehouses for community knowledge, but also served as a mechanism for evaluating the trustworthiness and reciprocity of others within the community. Through the combination of posting documents and face-to-face interactions, communities of practice helped individuals build reputations both as subject matter experts and as individuals that were willing to help others. This reputation development was cited as an important benefit from participating in community activities by many of those who participated in the study. One member of the programming community in the software development company remarked, *If you've done some good work on a project, you can package it up and put it into the Tool Pool. That is well perceived by other developers around the world, and it's a good way of getting your name known and raising your profile in the organization.*

Spawning new ideas for products and services. In several of the companies that we examined, the communities of practice served as breeding grounds for innovation. These communities provided a forum in which individuals were able to share a variety

of perspectives around a common topic. For example, software developers who worked with different customers often got together to exchange ideas about fixes for existing products and ideas for new software. One of these software developers commented on the community's role in bringing people together to come up with new solutions:

[The community] ... drives our software development from a real, in-the-field experience, and people exchange ideas about what the software would do, and about the situations they encounter with customers. It's very much appreciated by people in development so they see that what they develop is actually used, and how people are using it in the field. They find out what they are doing with it, what they like about it, and what they don't like about it.

Bringing in new or divergent points of view was also a technique used to spark innovation within the community. Several of the groups that we studied brought in outside speakers during community events to educate members on new developments in the field or provide alternative viewpoints. These outside influences were seen as valuable in ensuring that the community was exposed to a broad range of thinking from inside and outside the organization.

One of the primary reasons that communities were seen as an important vehicle for innovating was their ability to create a safe environment where people felt comfortable in sharing challenges. The development of these interpersonal relationships within the community was especially useful in asking sensitive questions or testing ideas that were not fully “baked.” In many of the companies that we examined, the ability of individuals to use other community members as a sounding board was a highly valued feature of community life. In these situations, individuals were willing to share innovative thoughts with those whom they trusted, yet were also able to tap their expertise to refine and explore these new ideas. As one member of the lending institution remarked:

In terms of support, I think that if I had any bottlenecks or any questions, I could always go to the community. There was a sense of belonging to a family of like-minded people who faced similar issues before. I feel very free to go to people who are part of it.