Exploring the potential of communities of practice for learning and collaboration in a higher education context

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Abstract

This paper examines the potential of communities of practice (CoP) as vehicles that promote learning and collaboration within organizations. Based on the idea that enhancing these capabilities will have an impact on organizational functioning, we present a qualitative study of five CoP in an educational setting. By analyzing eighteen interviews we identified learning and collaboration as the primary benefits of community activities. Learning included the promotion of formal and informal activities organized by community members. Collaboration was improved by establishing networks and professional alliances. The development of these benefits influenced the promotion of new practices.

Keywords: communities of practice, learning, collaboration, organizational performance, educational setting

1. Introduction

In the past few decades, organizational theorists have been interested in knowledge and learning as valuable assets through which organizations can gain a competitive advantage (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995; Pfeffer & Sutton, 1999). Based on these assumptions, successful organizations are those that constantly create and disseminate knowledge and continuously innovate (Nonaka & Takeuchi, 1995). As a result, organizations seek diverse strategies to “manage” explicit and implicit knowledge, which is distributed primarily among their members. Many of these initiatives are based on the use of technology and do not consider the importance of personal connections in generating and transmitting knowledge. They tend to ignore the fact that knowledge stems from and is diffused through social interaction among members of the organization (Effron, 2008; Wenger, 1998).

Communities of practice have been recognized recently as social structures that help produce explicit and implicit knowledge by promoting information sharing and collaboration among its members. The creation of networks becomes a strategic resource for organizations, since it facilitates the personal connections necessary for organizations to develop their collaborative infrastructure. These communities play a significant role in establishing...
this structure, modeling collaboration and demonstrating the benefits of knowledge sharing (Saint-Onge & Wallace, 2003).

2. Communities of practice and organizational performance

2.1. Communities of practice

A community of practice is a group of people who share a desire to learn and improve their practice (Lave & Wenger, 1991; Brown & Duguid, 1991). Wenger, McDermott & Snyder (2002, p. 4) define CoPs as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.” This definition highlights the informal, autonomous, and self-organizing nature of CoPs, and how they support a group of practitioners in building knowledge by sharing perspectives about their professional practice.

Communities of practice are organized around three structural elements: domain, community, and practice (Wenger et al., 2002). Domain consists of key issues or problems that members regularly experience. It creates a sense of accountability to a body of knowledge and therefore to the development of a practice. Community refers to the relationships and mutual commitment developed as result of continuous interaction. It creates the social fabric necessary for learning. Lastly, practice is the set of frameworks, tools, information, styles, languages, stories, and documents that community member’s share. As Wenger et al. (2002) noted, when these elements work together, they make a CoP an ideal knowledge structure, a social structure that can assume responsibility for developing and sharing knowledge. Thus, CoPs are groups of people who have a common interest in learning collaboratively through social interaction and through sharing knowledge about the best practices related to their profession. In addition, these communities add value to their members and organizations by generating and circulating knowledge, productive capabilities, and fostering innovation (Pör & van Bekkum, 2004).

2.2. Communities of practice and their value to organizations

Organizational literature has attributed considerable importance to the notion of CoP, since they propose an alternative view to organizational learning (Wenger, 1998). Wenger pointed out that the main objective of CoPs is not to design and implement training programs, but rather to expand the organization’s learning potential. Community members are able to pool their expertise, share their experiences, test new ideas, improve past processes and procedures, and find solutions that result in increased capabilities and improved performance (Saint-Onge & Wallace, 2003).

Liedtka (1999) noted that CoP allow organizations to develop meta-capabilities that are invaluable for creating and sustaining a competitive advantage. These meta-capabilities provide the infrastructure for developing new capabilities necessary for achieving success (Saint-Onge & Wallace, 2003). According to Saint-Onge & Wallace (2003) learning and collaboration are two key meta-capabilities inherent to CoPs. Learning is the ability to continually acquire new competences. Collaboration is the ability to work and learn across functions and business units. Both are linked because collaboration fosters learning throughout the organization. Therefore, CoPs contribute to the creation of spaces for learning and collaboration within organizations, helping them face the challenges of the knowledge era.

Communities of practice act as social structures that connect diverse expertise, experiences, and knowledge, encouraging an understanding of new perspectives (or old perspectives viewed from a different angle) and stimulating individual and collective learning. Participants in CoPs engage in “productive conversations” or “productive inquiry” (Pör & van Bekkum, 2004; Saint-Onge & Wallace, 2003) that promote learning and innovation. Productive inquiry is a dynamic process of questioning and validating information as well as the rules, guidelines and practices, through which tacit knowledge is retrieved and gives meaning to explicit knowledge. This
process becomes the catalyst to transform information into knowledge and to drive capability generation (Saint-Onge & Wallace, 2003). The development of this ability is supported by continuous interactions between community members and the strong interpersonal relationships they build. Familiarity, respect, and mutual trust among participants encourage the exploration and use of new approaches and the questioning of ideas. These contribute significantly to the improvement of an organization’s performance (Pör & van Bekkum, 2004; Wenger, 1998; Wenger et al., 2002).

Several empirical studies present arguments that support the idea of CoP as structures for learning and collaboration that advance organizational success and/or performance (e.g. Agranoff, 2008; Archibald & McDermott, 2008; Fontaine & Millen, 2004; Lesser & Storck, 2001; Zboralski & Gemünden, 2006). Lesser and Storck (2001), for example, found that CoP activities influence four areas of organizational performance: decreasing the learning curve; responding more rapidly to customer needs and inquiries; reducing rework and preventing the “reinvention of the wheel”; and, spawning new ideas for products and services. Similarly, Zboralski et al. (2006) concluded that there is a direct and positive relation between CoP and organizational performance. Other evaluation projects have found that these communities promoted connections between associates, facilitated communication, and reinforced trust. Simultaneously, community activities enhanced organizational performance through the adoption of better processes and new products (Meeuwesen & Berends, 2007). Several other authors suggest that CoP promote individual, team, and organizational benefits such as: learning and development, colleague recognition, the establishment of relationships and networks among co-workers, improvement in work quality, work satisfaction, quick access to information, innovation, problem solving skills, improved process efficiency, work coordination and integration, among others (e.g. Fontaine & Millen, 2004; Wenger et al. 2002; Zboralski, Gemuenden, 2006).

Regarding academic scenarios, we propose that higher education contexts are natural environments for the development of communities of practice. McDonald & Star (2008) stated, for example, that a CoP approach to teaching and learning in higher education provides a space for staff to collaboratively reflect on, review, and update current teaching and learning practices. More specifically, McDonald et al. (2008) showed that a CoP of professors at a business school resulted in professional support and development, improved dialogue and communication, and generated a sense of mutual trust. Similarly, Van Wyk (2005) reported the benefits of a CoP project for a university library system; these benefits included the diffusion of knowledge, the generation of new ideas, increased opportunities for innovation, work improvement, and a sense of belonging to a community.

In summary, we can assume that CoPs have the potential to promote the advancement and diffusion of knowledge within an organization. Based on continuous interaction and association, CoP enable collaborative knowledge networks among organizational employees. These activities can stimulate the development of new capacities and innovations, resulting in improved organizational performance. In the following section we describe the findings of a qualitative case study of CoP in an educational setting and the implications of their activities for learning, collaboration, and organizational performance improvements.

3. Method

This project started in 2007 for the library system of a higher education institution in Puerto Rico. The purpose of this project was to cultivate communities of practice to bring experienced professionals together with the hope of strengthening and improving diverse areas of library work. Initially, five CoPs formed around several topics of interest for the librarians (e.g. collection development, Web 2.0, information competences, etc.). After the first year, the research team decided to develop a case study using a qualitative approach to examine the perceived individual and organizational benefits generated by community activities (Yin, 1994). The results presented here are but one segment of a broader research project.
Eighteen CoP members were interviewed separately. Sixty-four percent of the CoP members participated in this study. Interviews were transcribed and were interpreted using content analysis. Participants were selected at random, and the final sample included individuals from different CoPs, work units, years of experience, and gender. We developed a questionnaire for semi-structured interviews based on four main topics, which were also the themes of the units of analysis used in the content analysis: contributions of CoPs, success factors of CoPs, effective practices for knowledge documentation, and influence on organizational culture. For this paper we focus on the first, contributions of CoPs, which include the individual and organizational benefits of these types of communities. NVivo software was used to codify the interviews. Each author coded the interviews separately and later discussed their codifications to reach evidenced conclusions.

4. Results

Based on an analysis of the interviews we identified learning and collaboration among members of the communities as the principal benefits of these communities of practice. The promotion of new practices, which may contribute to the improvement of library services constituted an additional benefit.

Learning was one of the most important benefits of CoP activities in this project. Through community activities and initiatives, participants learned of new materials, concepts, approaches, and technologies to facilitate their collaboration (i.e. Wikis, blogs, Skype). Most importantly, they exchanged knowledge, experiences, and the most effective practices. Some interviewees pointed out that through “dialogue” and “exchanging experiences” with community members, they gained new knowledge, particularly the kind that is difficult to codify and which is embedded in work routines. One interviewee said: “I have learned a lot from the communities of practice because of the diverse presentations and examples that other colleagues brought, which I compared with mine.” Another mentioned: “...I think it has been a great opportunity to learn from one another.” In this informal learning dynamic, CoP members highlight the importance of shared issues related to their work, including experiences or best practices, which contribute to learning about the domain of interest and the improvement of their professional praxis.

Along with this informal learning exchange, participants also pointed out formal learning opportunities, such as training sessions and workshops, as part of the community activities. One participant stated: “...several professional development activities have been generated by the community...and that is very positive because we do not have many training options, much less the resources to do them....” Another participant said: “[Communities of practice] have become a great way to keep up-to-date in my profession; because of the dynamic among my colleagues I have come in contact and experimented with different technologies, especially social media, which are extremely useful for libraries and for direct user services...” Since CoPs are conceptualized on the premise that learning is embedded in practice, the emergence of CoP serves as a strategy to improve organizational performance because community members continuously practice what they learn in both formal and informal environments.

The second benefit in this CoP project was the collaboration among participants and the establishment of professional networks and alliances. Interaction between community members increased knowledge, access to different experiences, and improved each participant’s expertise, leading to opportunities for engagement in future institutional projects. Similarly, relationships within communities improved communication among participants, enabling dialogue, which facilitates the sharing of new ideas, concerns, resources, and best practices. Participation in the community “has served as a communication vehicle between all [library] system units.” During the course of their participation in CoP, the librarians “created a social network throughout all libraries.” At the same time, they have “developed teamwork,” a “network” that is different than they were used to. Moreover, participants mentioned that they developed a sense of closeness and mutual trust through their participation in the communities. Some of them even mentioned feeling “at home” or feeling as though they were “working in the same building” (even though some community members are geographically in different locations). One of the participants said: “When I talk to people from my community, I tell them ‘I think [our relationship] will not end.’ The project will probably end, but I
 Improved communication, as well as collaborative alliances and networks among community participants are of particular interest due to their implications on professional practice within the context of CoP. Through dialogue and productive inquiry CoP members can identify new ideas or situations, share strategies, improve practice, and validate information in order to generate knowledge that improves their work and the performance of the organization. The promotion of new practices was yet another benefit derived from CoP activities. Participants mentioned several initiatives they are developing to enhance their work and their unit’s performance. Some examples included: an electronic repository to gather and exchange what is generated in CoP, initiatives to integrate information competences in college classes, initiatives to integrate information technology into library services (blogs, chats, etc.), the development of policies for collection acquisitions, and others.

According to participant interviews, improvements in work performance are largely due to the sharing of experiences and best practices. For example, one participant identified the benefits of “…sharing ideas with colleagues; ideas that are beneficial to maximize libraries’ resources…” These experiences and best practices are incorporated as new practices and services in every library within the system.

Participants recognized the existing connection between promoting new practices and generating and exchanging knowledge in CoPs: “people who participate in these communities have firsthand knowledge about best practices in other units... they can share [this knowledge] and we can incorporate it into our services....” Community members can learn new things through collaborative exchanges as part of their participation in CoP. But they can also assess existing knowledge in various domains and synthesize it into new ways of innovative capacity. This demonstrates the importance of collaboration and knowledge sharing among community participants, not only to enhance learning, but also to promote new practices among librarians.

5. Conclusions

In this paper we have attempted to elaborate on the idea of communities of practice as social structures that leverage learning and collaboration. Based on the review of the literature, and the case-study project, we can identify several key points. First, CoP facilitate formal and informal learning throughout the organization; they also promote the sharing explicit and implicit knowledge among its members. Communities of practice provide formal and informal scenarios for the development and diffusion of tacit and explicit knowledge, promoting learning and advancement of new competences among community participants. This seems to be an advantage for organizations that require constant renewal and use knowledge as an important asset in a rapidly changing environment. In addition, the organization obtains financial benefits, minimizing the need to invest more resources in formal training since CoP members contribute to their own professional development.

Second, communities of practice encourage collaboration between members of the organization, facilitating the development of networks and improving communication. The benefits of collaboration and the creation of networks among community participants foster communication and “productive inquiry”, which lead to learning and innovation. These processes also produce changes in the work environment, as well as in the rules and values of organization members. Thus, communities of practice can be conceptualized as “agents of change” (Saint-Onge & Wallace, 2003) capable of transforming the technical and social structures of organizations. Indeed, community activities transform the technical structure (processes, procedures, and the development and use of new tools or practices), as well as the social structure (relationships between colleagues, collaboration, sense of identity and unity of the community) of the organization. These implications are particularly relevant in academic and educational settings, were constant changes (i.e. technological, social) and environmental pressures (i.e. bureaucracy, budget cuts) require innovative approaches to learning and managing physical and cognitive resources necessary for remaining competitive in this “knowledge era.”
References


