

Virtual Communities of Practice

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INTRODUCTION

In this entry, we will first define this new form of learning and knowledge management that is communities of practice. We will present the concept as described by the creators of the concept but also comment on the role of these communities in organizational learning or informal learning. We will follow with some of the results, centering on the conditions of success and challenges that emerge, as well as limits in the learning and sharing process, which are often underestimated. We highlight some results from a research on communities of practice in Canada, in particular the main conditions and challenges of such new modes of knowledge creation and management, which don't always work automatically. We rely here on the results to a questionnaire survey administered to the participants of some communities of practice. Participants' commitment and motivation in the project, dynamism and continuity of leadership, organizational support and recognition of employees' involvement are the key elements to be considered in the analysis of a community of practice.

COMMUNITIES OF PRACTICE

The term 'communities of practice' was first used by Brown and Duguid (1991) and by Lave and Wenger (1991), and it was popularized more widely in two major works (Wenger *et al.*, 2002, 2000). It refers to the idea of sharing information and knowledge within a small group, as well as to the value of informal learning for a group and an organization. In our research, as is usually the case today, we consider people use technologies (computer, cell phone, ipad, etc.) to be in relation and exchange with each other, but also to keep track of some information and knowledge the group wants to stock. Wenger *et al.* (2002, p.4-5) describe a community of practice as a group of participants who:

Don't necessarily work together every day, but they meet because they find value in their interactions. As they spend time together, they typically share information, insight, and advice. They help each other solve problems. They discuss their situations, their aspirations, and their needs. They ponder common issues, explore ideas, and act as sounding boards. They may create tools, standards, generic designs, manuals, and other documents – or they simply develop a tacit understanding that they share. However they accumulate knowledge, they become informally bound by the value that they find in learning together. This value is not merely instrumental for their work. It also accrues in the personal satisfaction of knowing colleagues who understand each other's perspectives and of belonging to an interesting group of people. Over time, they develop a unique perspective on their topic as well as a body of common knowledge, practices, and approaches. They also develop personal relationships and established ways of interacting. They may even develop a common sense of identity. They become a community of practice.

In the 90s, observers mainly studied informal communities that were created spontaneously in a workplace. However, over the years and since 2000 particularly, there has been increasing interest in creating and cultivating such communities in workplaces (McDermott, 2000, 1999; Swan *et al.*, 2002; Wenger, *et al.*, 2002). Many of these communities are teleworking communities that use information and communication technologies, and this was the case in the communities we studied.

The following definitions help us to better understand what this concept actually means (Mitchell, 2002):

- Communities of practice are people who share a concern, a set of problems or a passion about a topic, and deepen their knowledge and exper-

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Table 1. various forms of communities of practice

Aspects	Informal	Supported	Structured
Objective	Provide a discussion forum for people with affinity of interest or needs within their practice	Build knowledge and capability for a given business or competency area	Provide a cross-functional platform for members who have common objectives and goals
Affiliation	Self-joining or peer invited	Self-joining, member invited or manager suggestion	Selection criteria outlined Invited by sponsors or members
Sponsorship	No organizational sponsor	One or more managers as sponsors	Business unit or senior management sponsorship
Mandate	Jointly defined by members	Jointly defined by members and sponsor(s)	Defined by sponsor(s) with endorsement of members
Organizational support	General endorsement of communities of practice Provision of standard collaborative tools	Discretionary managerial support in terms of resources and participation Supplemented array of tools and facilitation support	Fully-fledged organizational support on the same basis as organizational segments Budget allocation as part of business plans
Infrastructure	Most likely meets face-to-face; primary contact Has a means of communication for secondary contact	Uses collaborative tools Meets face-to-face on a regular basis	Uses sophisticated technological infrastructure to support collaboration and store knowledge objects generated in the community Highly enabled by technology
Visibility	So natural that it may go unnoticed	Visible to colleagues affected by the community's contribution to practice	Highly visible to the organization through targeted communication efforts that are stewarded by sponsors.

Source: From Davel and Tremblay (2011), adapted from Saint-Onge and Wallace (2003, p.36-37)

tise in this area by interacting on an ongoing basis

- A group whose members regularly engage in sharing and learning, based on their common interests

Wenger et al. (2002) as well as Mitchell (2002), among others, indicate that communities of practice take on various forms, and Table 1 highlights the differences that exist between types of communities. In the cases we studied, communities were of the structured type, most of them being formally supported by one organization, a few being inter-organizational, but all having to do with their work activity and not personal interests, as is more often the case in the informal type of community.

Much existing literature centers on face to face communities (Gherardi & Nicolini, 2000), but many communities actually function in a context of distance or telework (Hildreth et al., 2000). This brings us to the issue of virtual communities of practice, which are more and more common in a global environment,

and are the type of community we have studied. In our view, this virtual dimension is an important aspect of communities of practice theory, especially in the global context, and it requires more detailed analysis. We carried out this research in order to extend this analysis, and to identify the main challenges related to virtual or distance communities of practice.

At first, authors mainly studied informal communities that were created spontaneously in a workplace. However, over the years, there has been increasing interest in the creation of such communities in workplaces (McDermott, 2001; Wenger & Snyder, 2000), and even in the creation of teleworking communities that use information and communication technologies, as was the case of the project in which we participated.

The advantages of communities are said to be the following: informal diffusion of relevant knowledge, exchange of knowledge between peers and, as a result, improvement of innovation and productivity.

Much of the literature centers on face to face communities, while many function in a context of distance or telework, which brings us to talk of virtual

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