

## Chapter 5.2

# Social Software for Bottom–Up Knowledge Networking and Community Building

**Mohamed Amine Chatti**  
*RWTH Aachen University, Germany*

**Matthias Jarke**  
*RWTH Aachen University, Germany*

### ABSTRACT

Recognizing that knowledge is a key asset for better performance and that knowledge is a human and social activity, building ecologies that foster knowledge networking and community building becomes crucial. Over the past few years, social software has become an important medium to connect people, bridge communities, and leverage collaborative knowledge creation and sharing. In this chapter we explore how social software can support the building and maintaining of knowledge ecologies and discuss the social landscape within different social software mediated communities and networks.

### INTRODUCTION

Peter Drucker, among others, argues that in the emerging economy, knowledge is the primary

resource for individuals and for the economy overall; land, labour, and capital. He further argues that improving front-line worker productivity is the greatest challenge of the 21st century (Drucker, 1999). Knowledge management has become an important topic for the CSCW community within the last couple of years (Davenport and Prusak 1998). A specific contribution of CSCW to the knowledge management field has been to draw attention to the social aspect of knowledge. Within the CSCW community, some important research emphasises the social properties of knowledge and how it is shared among and between communities and networks (Wenger, 1998a; Engeström et al., 1999; Zager, 2002; Nardi et al., 2002; Stahl, 2005). Over the past few years, social software has become a crucial means to connect people not only to digital knowledge repositories but also to other people, in order to share knowledge and create new forms of social networks and communities. In this chapter, we explore how the emerging social software technologies can support collaborative knowledge creation and

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sharing and discuss the social landscape within different social software mediated communities and networks.

## **KNOWLEDGE, COMMUNITIES, AND NETWORKS**

### **The Social Aspect of Knowledge**

Many researchers have provided different definitions for the term knowledge. Nonaka and Takeuchi (1995) define knowledge as justified true belief. Davenport and Prusak (1998) view knowledge as a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms. Drucker (1989) states that Knowledge is information that changes something or somebody, either by becoming grounds for actions, or by making an individual (or an institution) capable of different or more effective action. Drucker further distinguishes between data, information and knowledge and stresses that information is data endowed with relevance and purpose. Converting data into information thus requires knowledge. And knowledge, by definition, is specialized. Naeve (2005) defines knowledge as “efficient fantasies”, with a context, a purpose and a target group, with respect to all of which their efficiency should be evaluated. Recently, Siemens (2006) points out that due to the nature of knowledge, it is very difficult to find a common definition and states that knowledge can be described in many ways; an entity and a process, a sequence of continuums: type, level, and application, implicit, explicit, tacit, procedural, declarative, inductive, deductive, qualitative, and quantitative.

Different views of knowledge exist and many

researchers have developed classifications of knowledge, most of them in form of opposites (Hildreth and Kimble, 2002). A distinction that is often cited in the literature is made between explicit and tacit knowledge. Explicit knowledge is systematic knowledge that is easily codified in formal language and objective. In contrast, tacit knowledge is not easily codified, difficult to express and subjective. Examples of tacit knowledge are know how, expertise, understandings, experiences and skills resulting from previous activities (Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998). Similarly, Davenport and Prusak (1998) differentiate between structured and less structured knowledge. Seely Brown and Duguid (1998) adopt the terms know what and know how, while Hildreth and Kimble (2002) distinguish between hard and soft knowledge.

Although there is no common definition of the term knowledge, there is a wide agreement that knowledge is social in nature. Many researchers emphasise the social, collective and distributed aspect of knowledge. Polanyi (1967) places a strong emphasis on dialogue and conversation within an open community to leverage tacit knowledge and one of his three main theses is that knowledge is socially constructed. Nonaka and Takeuchi (1995) state that the dynamic model of knowledge creation is anchored to a critical assumption that human knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge. They further note that this conversion is a social process between individuals and not confined within an individual. Wenger (1998a) points out that knowledge does not exist either in a world of its own or in individual minds but is an aspect of participation in cultural practices. He uses the term participation to describe the social experience of living in the world in terms of membership in social communities and active involvement in social enterprises. Participation in this sense is both personal and social. It is a complex process that combines doing, talking, thinking, feeling, and belonging. It involves our

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