

## Chapter 12

# The Influence of Collaborative Web on Knowledge Management, Organizational Structure and Culture in Knowledge-Intensive Companies

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### ABSTRACT

*Knowledge-intensive companies are quickly changing, involving many people working in different activities. Knowledge in such companies is diverse and its proportions immense and steadily growing. The distribution of knowledge across project teams, communities of practice, and individuals is therefore an important factor. With collaborative Web, tools like wikis, blogs, or social networks are used for collaboration and knowledge sharing. In this chapter, we question what influence these tools have on knowledge management, organizational structure, and culture of knowledge-intensive companies. As a result of our interviews and surveys done in Serbia, we found that with collaborative Web, organizational structure, culture, and knowledge management change is perceived among employees and that employee's loyalty changes from company orientation toward virtual community orientation.*

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## INTRODUCTION

Knowledge-intensive companies are based on their capability of making use of intangible, intellectual resources and assets (Styhre, 2000). Personnel are the most significant resource of such a company, whereas capital and equipment can be regarded as less important (Alvesson, 2000). Competencies of such organizations can be advanced by the development of inter-organizational collaboration (Wikström et al., 1994), whereas team organization is important (Blackler, 1995).

Knowledge-intensive organizations have problems identifying the content, location and use of their knowledge (Rus &, 2002). For example, in knowledge-intensive business, software development is a group activity, whereas groups are divided geographically. They have to communicate, collaborate and coordinate in their group but also with software developers of other groups or even of other companies. Collaboration tools for knowledge management could help to share knowledge and collaborate in the software development field.

With Web 2.0 (O'Reilly, 2005) or Collaborative Web, companies explore new ways to cultivate and exploit knowledge sharing with customers, suppliers and partners (Mentzas et al., 2007). Web 2.0 has totally reinvented the vision of the web as a participatory space in which every user is invited to contribute in the context of online interactions. According McKinsey (2007), companies use tools like Wikis, Blogs or Social Networks because they are important for supporting their market position and for addressing customers' demands. These web 2.0 tools can improve organizational and individual performance, but they also encounter several problems. This chapter aims to discuss the influence of collaborative web on knowledge-intensive companies, especially on knowledge, organizational structure and culture.

Collaborative Web provides tools for knowledge creation and distribution that until recently

existed only within the boundaries of best organizations. These tools are available to open communities of interested parties at little or no cost, radically changing environment in which organizations do business. Revolution that internet related technologies had on business and other aspects of our world has been compared several times to the printing press (Builder, 1993; Badwen & Robinson, 2000) or, more modestly with the telegraph (Standage, 1998). Improvements in the nature of web continued to influence not only knowledge in the organizations, but also culture, processes, structure and even the nature of relationship between an organization and its employees.

The benefits of collaborative Web for business have been studied (Aissi et al., 2002; Tredinnick, 2006; Chen et al., 2007) even before the dissemination of Web 2.0 (Cutkosky et al., 1996). Collaboration, described as sharing of common business goals by employees, should bring the organization out of all physical boundaries of departments, functions and levels of hierarchy (Malik & Goyal, 2003). In accordance with change management theory, a first surge of publications related to emerging concepts describing tangible benefits on business. As the concept matures, we believe that the research focus can be widened and aimed at research of influence that collaborative web has on other aspects of the organization, such as knowledge, structure and culture.

Our main aim is to discuss the influence of collaborative Web on knowledge-intensive companies. The main body of organizational knowledge has resided within the organizational boundaries since the dawn of the first organization. The development of practical and economical technology to access vast amount of mainly explicit knowledge was one of the influence directions internet had on organizations.

The dissemination of Web 2.0 concepts opened new qualitative improvements of influence of the web to the organizations. According to Forrester

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