

## Chapter 5.26

# Some Implementation Challenges of Knowledge Management Systems: A CRM Case Study

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### **ABSTRACT**

*The promise of knowledge management systems is challenged by implementation problems. This CRM case illustrates that technology-driven approaches are not likely to succeed. It also indicates some limitations of top-down managerial interventions, arguing that we need a deeper understanding of learning processes to be able to implement KM systems successfully. A more experimental implementation strategy is suggested.*

### **INTRODUCTION**

The great expectations for knowledge management systems illustrate a phenomenon long

acknowledged by IS research: A strong socio-economic trend (the growth of knowledge workers) fuses with a technological trend (knowledge supporting technologies like Lotus Notes and World Wide Web). In a global economy, knowledge may be the greatest competitive advantage for a company (Davenport, Prusak, 1998), with the support of KM technology to structure the knowledge and make it available in the company's learning process.

On the other hand there are continuing reports of disappointments, due to poor alignment between business and technology (Applegate et al., 1999) or the mismatches between the socio-technical potential and the old management practices (Ciborra, 1996). Implementing information systems has proved to be difficult (Markus,

Benjamin, 1997), and the main challenge with KM systems also seems to be implementation (Ericsson, Avdic, 2002).

Implementation is mostly seen as an acceptance challenge (Kwon, Zmud, 1987). This view is probably valid also in the area of KM systems (Ericsson, Avdic, 2002), but there are two aspects which may deserve a closer examination. First, Leonard-Barton observed (1988) that company adoption does not necessarily imply user adaptation. The spread of the knowledge-based, less hierarchical organizations with both more powerful and knowledgeable users (Nambisan et al., 1999) has accelerated this development: The knowledge user decides whether he or she will use the system, and in what way.

Secondly, the use of knowledge systems is quite different from the use of transaction systems. Since KM systems usually are set up to support organizational learning, they constitute part of a much more complex process. Argyris and Schön (1996) defines organizational learning in these terms:

*Organizational learning occurs when individuals within an organization experience a problematic situation and inquire into it on the organization's behalf (...) In order to become organizational, the learning that results from the organizational enquiry must become embedded in the images of the organization held in its members' minds and/or in the epistemological artefacts (the maps, memories, and programs) embedded in the organizational environment (p. 16).*

This process is coined organizational learning II or double-loop learning, in contrast to single-loop learning, i.e., problem-solving. Organizational learning concerns changing the theory-in-use, the underlying assumptions of how things are working, which heavily influence the patterns of actions. Argyris and Schön observe that there often is a mismatch between the official espoused theory and the theory-in-use. An important implication

from this is that only real double-loop learning can change the theory-in-use.

Thus, the question posed in this chapter is the following: How should we implement KM systems in a way that supports organizational learning? To illustrate this we shall tell a story of a six-year CRM project - an important goal being knowledge synergies - trying to describe in some detail how a knowledge-based organization addressed the challenge.

The chapter is structured as follows: first, the chapter describes the case methodology. There is followed with a brief outline of the promise of CRM systems. Next, the chapter discusses two process perspectives on implementation are presented, and the case is described in some detail, focusing on the implementation process and actor behavior, told by the practitioner. The chapter then discusses solutions and recommendations, focusing on the interaction between learning and management. Finally, it briefly outlines future trends and finishes with a summary of the conclusions.

## **METHODOLOGY: A CASE STUDY**

This chapter tells the story of a Norwegian knowledge-based organization, the Oslo-based National Institute of Technology (TI) that started implementing a CRM system in 1993. The focus is on the implementation process that lasted six years. The author was the IT manager at the institute during this period.

Using a qualitative and interpretive approach (Miles, Huberman, 1994), the study focuses on behavior as a practitioner experienced the project, using only very simple theoretical concepts. These concepts are part of the narrative, illustrating what we conceived was our methodological options at the time. The empirical evidence also includes company and project documents and user satisfaction surveys.

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