

Knowledge Integration in Profession-Oriented Work: a Cross-Case Analysis

Introduction

Knowledge is an important resource in many work practices, not at least within profession-oriented work. Cooperating and social working environments are promoting creation, coordination, distribution and integration of knowledge that will be used by the individuals in organizations (Sambamurthy and Subramani, 2005). Professionals' ongoing engagement in work practice means a reproduction of the knowledge and knowing generated in those practices. How people socially create and understand knowledge has a great impact on how their knowing might be improved by processes of integration, distribution and application of knowledge in their work practice. For that purpose, the role of information systems (IS) has been critically discussed. Our assumption is that IS has a great potential for supporting such knowledge processes, but it is needed to be further explored. In creating knowledge management systems and tools, both the technical and the social aspects need to be considered (Lundh Snis, 2002). However, prevailing approaches to studying knowledge management tend to focus on the importance of knowledge transfer across boundaries, and the value of generating a set of best practices that can be propagated through dispersed work activities (Orlikowski, 2002; Mathiassen, 2003). Focusing on knowledge as a process, i.e. knowing (see for example Orlikowski, 2002; Cook and Brown, 1999; Boland and Tenkasi, 1995) means that we pay special attention to *how people do* when integrating and coordinating the knowledgeable actions. These processes are argued as the most important ones as they are the sources to developing peoples' capacity to act knowledgeable in specific situations in order to achieve a skillful, professional practice.

Research approach

The aim of the paper is to understand how different types of profession-oriented work practices can be facilitated through IS in order to improve collaboration and knowledge integration between different groups and professions. The ethnographical study consists of two different cases where profession-intensive work is carried out; i) in aircraft maintenance work, and ii) in care taking work. The inherent complexity, multiplicity and dispersion of a profession-oriented work practice complicate how we think about and study knowledge management. It suggests the importance of exploring knowing as means of how people engage in knowledgeable actions in their ongoing practice. The analysis of the two cases will result in different implications of similarities and differences and thus, an identification and construction of various knowledge integration mechanism will be discussed. This discussion is inspired by the work of Boland and Tenkasi (1995), Wenger (1998), Kerosuo and Engeströms (2003), and Maaninen et al (2008) by means of brokers and objects that crosses boundaries.

Results

In order to understand the work practices within the studied profession-oriented work context the concept of profession and its characterization is used. Hellberg, Saks and Benoit (1999) make a distinction between two different types of professions; T(thing)- professions and L(life)-professions, which differs from each other in several ways. The characteristics of each

of the profession type are important to highlight in order to understand the knowledge processes in the context of these different profession types. The results show several implications for combining and integrating various forms of knowing within and across the two cases.

One of the key results is that *profession-oriented barriers* exist, especially within the T-professions. The process of knowing for T-professions in their complex and critical work is related to the knowledge, “possessed” by a particular sub-profession. Even if this knowledge is gathered through collaboration and negotiation with other people from within the profession or from sub-professions, there is a challenge to facilitate integration mechanisms to support this. To have each profession’s knowledge base integrated and coordinated for other professions by IS tools and instruments, means at the same time that the professions run the risk to be de-professionalized. Then, the knowledge is not longer unique for each profession.

The L-professions express a great need of having “the right approach” (knowing) for IS knowledge and competence in their work practice. They want to bridge the gap between the knowledge work activities and the related use of the various IS tools provided. This is important for the L-professions to *establish trust* for the use of IS and the ability to integrate knowledge distributed by IS.

Discussion

Our discussion is about suggesting improved IS support for knowledge integration in profession-oriented work. When IS are introduced as a support for performing different work activities it will influence the professions and their work. The professions strongly protect their own work, because it constitutes the basis for each profession. Implications about mediators and boundary objects (as brokers and boundary subjects) will be discussed. It is argued that such a brokering approach for knowledge integration between different professions and actors will enhance the capability of knowing.

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