The Adventure of Structuring Knowledge During Emergencies: Applying the Concepts “Knowledge Structuring” and “Knowledge Domination” on a Real-Life Work Situation

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ABSTRACT

This paper applies two concepts, ‘knowledge structuring’ and ‘knowledge domination,’ to a real life work situation. The purpose is to explore, analyze and discuss what happens when management interferes into the activities of a knowledge worker in a specific organizational setting by computerizing a key document. Exercising knowledge is delicate and complex. This study makes visible how some parts of performing anesthesia become structured and re-structured when the anesthesia patient record is transformed into a knowledge management system at the same time as someone or something influences how that structuring takes place.

Keywords: Anesthesia, Interpretative Schemes, Knowledge Domination, Knowledge Management, Knowledge Society, Knowledge Structuring, Structuration Theory

INTRODUCTION AND PURPOSE

This paper applies two concepts “knowledge structuring” and “knowledge domination” when analyzing the outcome of knowledge management activities in a real life work situation. It explores and discusses what happens when management interferes into the daily activities of a knowledge worker in a specific organizational setting by computerizing a key document.

What takes place in this study is an example of all the structuring and re-structuring concerning work-processes and work-tools that is going on today. It is also an example of how modern man tries to manage knowledge to create increased values in society. These efforts have many different implications for people involved. This paper is not meant to be a full description on what happens when a patient record is transformed into a knowledge management system. It directs itself towards management and wants to touch on this very important question of how these computerized systems influence the way a specialist or a knowledge worker exercises his or her knowledge.

The section that follow presents the theoretical framework used in this paper, then a description of how research has taken place.

DOI: 10.4018/jhdri.2011010102
is presented, and some information about the research context.

THE PRACTICE OF MANAGING KNOWLEDGE IN THE KNOWLEDGE SOCIETY

This research takes place in the knowledge society (Lane, 1966; Bell, 1974; Böhme & Stehr, 1986; Drucker, 1993; Castells, 1996; OECD, 1996). OECD has used the expression “the knowledge-based economies” instead of “the knowledge society” and characterized them as “those which are directly based on the production, distribution and use of knowledge and information”. One important difference between the two expressions “the information society” and “the knowledge society” is that the first one is characterized by low-cost information and a general use of information and communication technology while the key factor in the second is mainly investments in people, utilizing new information and communication technology. In the knowledge society there are a continuous structuring and re-structuring, construction and re-construction and learning and re-learning going on due to implementing new information and communication technology.

Knowledge is viewed as localized and embedded in a specialist practice. It is an ongoing social process of construction and collective action in organizations and a cognitive capability that empowers its possessors with the capacity for physical or intellectual action. Exercising knowledge is a structured activity. In our heads we always make plans for what to do, how to do it and what to do next. There is even a specific place in the frontal lobe of the brain that is vital for planning. When an organizational setting is structured the knowledge that is exercised in this setting also becomes structured. I propose that how knowledge is structured depends on who dominates over the knowledge exercised. Professional and specialist knowledge is a matter of both formal education based on scientific knowledge and skills (Abbott, 1988). A professional has the same education as others in the same field but there are better and less good professionals. The difference lies in their capacity to learn from their experience, of acquiring “tacit” knowledge. There is a tacit dimension to all knowledge. Tacit knowledge is learned through experiencing and doing a task, during which the individual develops a feel for and capacity to make intuitive judgments about the successful execution of the activity. Tacit knowledge consists, among other things, of search rules, or heuristics, that identify the problem and the elements consisting of the solution (Polanyi, 1966). They may also be compared to mental schemas or interpretative schemas.

Modalities such as interpretive schemes structures interactions in society and organizational settings. They influence theory of coding and this is decided by symbolic orders or modes of discourse. A schema influences the encoding (interpreting and taking in) of new information, memory for old information and inferences about missing information. It is a way of organizing information about the world relevant to a particular task and can be described as a filtering mechanism. Mental schemas are difficult to change. People often ignore exceptions to the schema; they even interpret the exception as proving the schema. Many of the information-processing advantages of schemas would be lost if they changed at each encounter with slightly discrepant information. But having an incorrect schema is also costly since it can make people insufficient problem solvers. The wrong mental schema can lead one to be inaccurate, biasing encoding, memory, and inference. But still schemas are supposed to be cognitively more efficient than understanding each instance afresh (Fiske & Taylor, 1991).

There are person schemas, self-schemas, role schemas and event schemas. Interpretative schemas are influenced by the shared understanding of a group of people about a phenomenon. A physician within a certain specialist domain is socialized in how to interpret certain situations and solve certain problems. When doing that he plays the role of a physician. He acts out the role schema of being a doctor.