Knowledge Management Systems Acceptance

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INTRODUCTION

Knowledge management is a set of systematic actions that organizations can take to obtain the greatest value from the knowledge available to it (Davenport & Prusak, 1998). Systematic means that knowledge management is made up of intentional actions in an organizational context. Value means that knowledge management is measured according to how knowledge management projects contribute to increased organizational ability (see for example Prieto & Gutiérrez, 2001; see Goldkuhl & Braf, 2002, on the subject of organizational ability). The motivation for knowledge management is that the key to competitive advantage for organizations in today's business world is organizations' ability to manage knowledge (Nonaka & Takeuchi, 1995; Davenport & Prusak, 1998). Knowledge management as an intentional and value-adding action is not easy to accomplish in practice (Scarbrough & Swan, 1999). Scarbrough and Swan (1999) present several case studies in knowledge management, successful and unsuccessful in their respective knowledge management projects. A major point and lessons learned from the case studies is that prevalent approaches in knowledge management overstate technology and understate how technology is implemented and applied.

To succeed with knowledge management, encompassing development of information technology-based information system, some requirements have to be fulfilled. An important aspect in the development process is system acceptance. Implementation is at large a process of acceptance. Implementation is the process where the system becomes an integrated part of the users' or workers' work practice. Therefore implementation is essential to make a knowledge management project successful in order attain an increased organizational ability and to succeed with knowledge management.

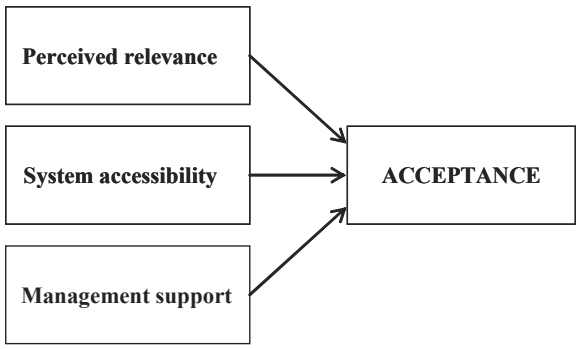
ISSUES OF KNOWLEDGE MANAGEMENT: SYSTEMS AND ACCEPTANCE

In this section we provide broad definitions and discussion of the topics to support our positions on the topics of knowledge management and systems acceptance.

MANAGING KNOWLEDGE

Work in knowledge management has a tendency to omit social or technological aspects by taking on one of two perspectives on knowledge management, the anthropocentric or the technocratic view (Sveiby, 2001; Swan, 1999). The anthropocentric and the technocratic views represent two contradictory views on knowledge management and can be summarized as technology can or technology cannot. The gap between the anthropocentric and technocratic view depends on a difference of opinions concerning the notion of knowledge. The technocratic view conceives knowledge to be some organized collection of data and information, and the anthropocentric view conceives knowledge to reside in humans, not in the collection (Churchman, 1971; Meredith & Burstein, 2000). Our conception of knowledge is that of the anthropocentric view. Taking on an anthropocentric view on knowledge management does not mean that we discard knowledge management technologies; we rather take on a balanced view on the subject. Information technology can support knowledge management in an organization through a number of different technological components, for example intranets, extranets, data warehouses, and database management systems (Borghoff & Pareschi, 1998; Tiwana, 2000; Ericsson & Avdic, 2002). The point in taking on an anthropocentric view of knowledge management is not to lose sight of the knower who gives meaning to the information and data found in IT-based knowledge management systems.

Figure 1. Requirements of Acceptance Model (Ericsson & Avdic, 2003)



KNOWLEDGE MANAGEMENT SYSTEMS

Information systems can include either operative or directive and decision support information (Langefors, 1966; Yourdon, 1989). Operative systems provide system users with information necessary in workers' daily work, while directive and decision support systems provide system users with information that improves the quality of decisions workers make in daily work. Knowledge managements systems are systems developed to manage knowledge directly or indirectly to give support for an improved quality of a decision made in workers daily work, and as an extension, an increased organizational ability. A knowledge management system typically includes directive information, for example in guiding a user's choice in a specific work situation. Such systems are often optional in the sense that users can deliberately refrain from using the system and/or refrain from taking the directed action. Accordingly, user acceptance is crucial for the degree of usage of knowledge management systems.

ACCEPTANCE OF TECHNOLOGICAL SYSTEMS

Technology acceptance has been subject of research by, for example, Davis, Bagozzi, and Warshav (1989), who developed the well-known Technology Acceptance Model (TAM) and later a revised version of the original model, TAM2 (Venkatesh & Davis, 2000). TAM is an explanative model explaining user behavior of computer technologies by focusing on perceived ease of use, perceived usefulness, attitude towards use, and behavioral intentions as determinants of user behavior. TAM2 is an extension of the original model including external factors related to perceived usefulness.

The framework for system acceptance, Requirements of Acceptance Model (RAM) have some resemblances with TAM and the later TAM2. RAM is in comparison with TAM descriptive in nature. Workers' work practice is treated as an integrated element of RAM, compared with not being treated as a determinant of system use in the original TAM and as an external factor in TAM2. Further, RAM covers acceptance of knowledge management systems, and TAM/TAM2 cover a broad range of computer technologies. RAM systematically acknowledges factors important in implementation of knowledge management systems to gain acceptance of such systems.

REQUIREMENTS OF THE ACCEPTANCE MODEL

We perceive acceptance to be a function of perceived relevance, systems accessibility, and management support. Together these elements constitute our framework RAM. In this section we present the requirements of acceptance in RAM. The Requirements of Acceptance Model is illustrated in Figure 1.

PERCEIVED RELEVANCE

The workers, who are to use the system, must perceive the knowledge management system as relevant. Since it is possible for workers to work without using the system, it has to be obvious that usage of the system implies adding value to the work result. An additional aspect of relevance related to perceived relevance is how the system should be integrated in running work, that is, to make the system an integrated part of the workers' work practice.