Supporting Knowledge Evaluation to Increase Quality in Electronic Knowledge Repositories

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ABSTRACT

Knowledge forms an important asset in modern organizations. In order to gain and sustain competitive advantage knowledge has to be managed. One aspect of this is to use Electronic Knowledge Repositories (EKR) to enhance knowledge sharing, reuse and learning. The success of an EKR is dependent on the quality of its content. For knowledge to be stored in an EKR, it has to be captured. One crucial part of the capture process is to evaluate whether the identified knowledge should be incorporated in the EKR or not. Therefore, to increase quality in an EKR, the evaluation stage of the capture process must be successfully carried out. Based on an interpretive field study and an extensive literature review, this paper identifies and characterizes Critical Success Factors (CSF) in the evaluation stage and presents guidance aiming to support implementation of the evaluation stage with the purpose to increase the quality of an EKR. In particular, the guidance supports the decision whether identified knowledge should be stored or not and it highlights the importance of performing evaluation addressing correctness, relevance, protection and redundancy. The characterization of the capture process contributes mainly to KM theory, and the guidance to KM practice.

Keywords: Capture, Critical Success Factors (CSF), Electronic Knowledge Repositories (EKR), Evaluation Criteria, Guidance, Information Quality

1 INTRODUCTION

To gain and sustain competitive advantage organizations must manage their knowledge resources, i.e. they need a conscious strategy for Knowledge Management (KM). Successful KM that contributes to improved organizational effectiveness requires that the appropriate knowledge is provided to those that need it when it is needed (Jennex, Smolnik & Croasdell, 2007). One way to do this is to implement Electronic Knowledge Repositories (EKR), a key form of KM (Kankanahalli, Tan & Wei, 2005). EKR prevent knowledge from being lost when a
specific employee leaves the organization and, furthermore, according to Aggestam (2006a), they are a feasible start for an organization that desires to achieve maturity as a Learning Organization (LO).

The success of an EKR is dependent on whether or not the repository is actually used. For a knowledge repository to be used the users must perceive that its usage will greatly enhance their performance at work (Sharma & Bock, 2005). Hence, what is stored in the repository is critical for success. In order for knowledge to be stored in the repository it needs to be captured. Thus, to be able to manage knowledge, the ability to capture it is a key aspect (Matsumoto, Stapleton, Glass and Thorpe, 2005). Furthermore, according to Jennex et al. (2007), capturing the right knowledge is necessary for KM success. This is also corroborated by Sharma and Bock (2005) who manifest that quality, for example reliability and relevance, in the knowledge repository has to be high for knowledge re-use to take place. Hence, we consider the process of capturing the “right” knowledge to be critical for the success of an EKR. One problem related to capturing knowledge is a lack of awareness of the complex issues related to an effective knowledge capture process and the benefits achieved through it (Hari, Egbu & Kumar, 2005). Also, there is a lack of systematic support for implementing KM in organizations (see Wong & Aspinwall, 2004). This paper aims to decrease these lacks.

Knowledge capture can be defined as a two stage process involving 1) the identification of knowledge to be captured, and 2) the evaluation of identified knowledge for possible storage in the EKR. Storing all identified knowledge causes information overflow and low quality in the EKR resulting in problems to find the required knowledge. “It’s difficult to make people remember that they don’t need to store everything,” as put by an HR manager in a large Swedish company. Hence, evaluation of identified knowledge is crucial when capturing the “right” knowledge. It is well known in the KM literature that too many KM projects fail. From the perspective of what we store in the EKR is critical for success, it is clear how complicated it must be to perform the evaluation stage efficiently.

Storing the “right” knowledge requires knowledge and understanding about what conditions those need to be met in the evaluation stage of the capture process, but here we have a problematic gap in the literature. In the literature, the topic of Success Factors (SF) in knowledge management work is frequently discussed, for example, by Davenport and Prusak (1998), Hung et al. (2005), Montequin (2006), and Storey and Barnett (2000). We can also find studies identifying SF with regard to employee contribution of knowledge to EKR (e.g., Kankanhalli et al., 2005; Jan & Jeffres, 2006). However, since employee contribution of knowledge is only one aspect of the knowledge capture process, more research is needed to identify and understand SF for this important knowledge process, i.e. here is a problematic gap. With the purpose to decrease this gap and increase the body of knowledge concerning conditions in the evaluation stage as well to provide support in this stage of the capture process, the goal of this paper is twofold: 1) To define and characterize Critical Success Factors (CSF) for the evaluation stage of the capture process and, based on these, 2) present guidance for systematic implementation of the evaluation stage with the purpose to increase the quality of an EKR. To achieve the paper’s goal we carried out a qualitative analysis including a theoretical analysis and an interpretive field study. This research work resulted in two contributions, one to KM theory and one to KM practice:

- **A description of CSF in the evaluation stage of the capture process:** This contribution extends the existing KM theory by describing success factors for a specific stage in the capture process. By doing so, the factors can be more detailed and concrete described which also enhances practical use. This is mainly a contribution to KM theory and hence the