

Collaborative Knowledge Management: Identifying and Sharing Knowledge in Teams

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ABSTRACT

Traditionally, knowledge management (KM) is viewed at the organizational level of analysis, particularly leveraging communities of practice (CoP). Yet, much work remains to understand issues affecting knowledge management in team environments, particularly collaborative knowledge management – how team members share knowledge through social interaction. By taking a socio-technical view that examines the interaction of team work and existing technology, this study explores how knowledge workers -- in a team environment -- identify and share knowledge, as well as provide insight to a more general collaborative knowledge sharing model.

Categories and Subject Descriptors

K.4.3 [Computers and Society]: Organizational Impacts – *computer-supported collaborative work*.

General Terms

Human Factors.

Keywords

Collaborative Knowledge Management, Collaborative Knowledge Creation, Socio-Technical, Teams, Ethnographic Study

1. INTRODUCTION

Traditionally, knowledge management (KM) is viewed as a way for organizations to harness intellectual capital for competitive advantage [3]. From this perspective, information and communication technologies such as knowledge management systems (KMS) have flourished in organizations. Yet, this perspective of KM focuses on the organizational level of analysis, particularly leveraging communities of practice (CoP) as a way to engage employees in the KM process [1]. Although CoPs engage some social and cultural aspects of KM through the sharing of experiences, much work remains to understand issues affecting knowledge management in team environments.

Multidisciplinary teams of knowledge workers are a common feature of modern organizations [2]. To successfully accomplish their work, team members must collaborate with each other; one important aspect of team work is sharing knowledge. Yet, we have little understanding of the collaborative knowledge management (CKM) practices of knowledge workers beyond what Webber has posited, “Conversations are the way

knowledge workers discover what they know, share it with their colleagues, and in the process create new knowledge for the organization” [4]. Therefore, to develop effective team processes and to design KMS that support their work, we must better understand the CKM practices of knowledge workers.

To examine CKM practices, I plan to study the work practices of team-based knowledge workers in departments of Information Technology and to develop a preliminary model of CKM practices. I will attempt to identify the collaborative knowledge sharing activities of IT team members by focusing on their work, not team results. This will uncover not only what the IT team members know, but also what they do not know. There may be a plethora of information at hand, but understanding how to manage workers’ abilities to make connections between disparate pieces of valuable information is at the heart of knowledge management.

2. RESEARCH QUESTION

The study looks to (1) uncover how knowledge workers in team environments share knowledge through social interaction and (2) develop a model of CKM practices. We are interested in answering such questions as (1) How do team members share knowledge amongst themselves? (2) What role does technology play in sharing knowledge? (3) How do teams reuse knowledge once it is created? By taking a socio-technical view that examines the interaction of team work and existing technology, I plan to explore how knowledge workers -- in a team environment -- identify and share knowledge, as well as provide insight to a more general collaborative knowledge sharing model.

3. METHODOLOGY

To address the research questions, I will utilize an ethnographic approach of observations and interviews to delve into the details of the CKM activities of the teams and the role that technology plays in either supporting or hindering these activities. This approach will allow me to collect rich data for further analysis, and will provide the appropriate methods for studying the work itself.

4. POTENTIAL OUTCOMES

Outcomes of this study include a preliminary understanding of the characteristics of collaborative knowledge management as well as a high level model of CKM activities. For example,

CKM activities are primarily real-time, synchronous interactions between individuals of different perspectives and/or disciplines. Further, all team members are aware of the value of the knowledge sought.

A model of CKM (figure 1) might include 3 overall areas. First, the team must create actionable information (knowledge) by integrating information and knowledge from various individuals. Next, the team must take action and use the knowledge. Lastly, the team must recycle/reuse the knowledge in some way in order for it to be considered knowledge management.

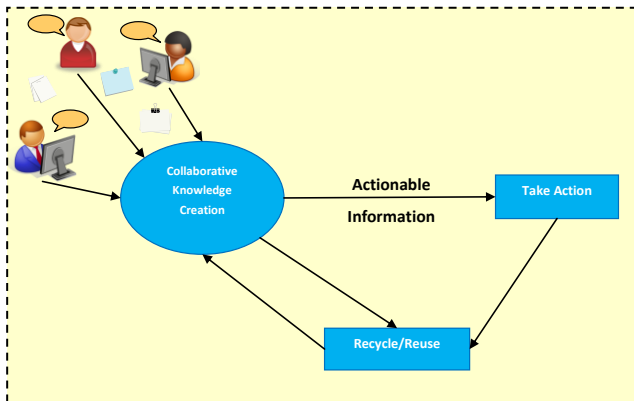


Figure 1. Preliminary Model of Collaborative Knowledge Management.

5. REFERENCES

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