

Collaborative Knowledge Management: Identifying and Sharing Knowledge in Teams

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1. INTRODUCTION

Traditionally, knowledge management (KM) is viewed as a way for organizations to harness intellectual capital for competitive advantage [5]. 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" [6]. 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, we plan to study researchers affiliated with the Hershey Center for Applied Research (HCAR). Researchers collaborate on projects because of the often multidisciplinary nature of the work. This collaboration has increased in recent years as information and communication technologies (ICTs) have improved. One such Web 2.0 ICT is INTEL MARX's ThoughtShare™, a social software which enables "collective intelligence" through the use of dynamic networks of co-workers, partners and customers [4]. Most notably, ThoughtShare™ was implemented by HCAR "to help spur partnerships and innovation between research scientists, venture capitalists, state economic development agencies and the research park" [3].

2. RESEARCH QUESTION

The study looks to (1) uncover how knowledge workers in team environments share knowledge through social interaction and (2) determine which features of ThoughtShare™ facilitate,

motivate, or constrain this social construction of knowledge. We are interested in answering such questions as (1) How do team members share knowledge amongst themselves? (2) What role does a technology such as ThroughShare™ play in sharing knowledge? By taking a socio-technical view that examines the interaction of the technology and team work, we plan to explore how knowledge workers -- in a team environment -- identify and share knowledge, as well as provide insight into improving the design of ThoughtShare™.

3. METHODOLOGY

To address the research questions, we will utilize a multi-method approach of observations, interviews, and surveys to delve into the details of the CKM activities of the research teams and the role that ThroughShare™ plays in either supporting or hindering these activities. This multi-method approach will allow us collect rich data for further analysis.

4. REFERENCES

- [1] Borbely, J., *Lessons from Five-Plus Years of Knowledge Management*, in *Knowledge Management Lessons Learned: What Works and What Doesn't*, M.E. Koenig and T.K. Srikantaiah, Editors. 2004, Information Today, Inc.: Medford, New Jersey. p. 311-331.
- [2] Hackman, R., ed. *Groups that Work (and Those That Don't): Creating Conditions for Effective Teamwork*. 1990, Jossey-Bass Publications: San Francisco.
- [3] Intelmarx. *Intelmarx Awarded to Create Web 2.0 Network Site for Research Facility*. 2008 [cited 2008 August 25]; Available from: <http://www.intelmarx.com/documents/PR-HCARbegins.pdf>.
- [4] Intelmarx. *Intelmarx ThoughtShare™*. 2008 [cited 2008 August 18]; Available from: <http://www.intelmarx.com/thoughtshare.php>.
- [5] Koenig, M.E. and T.K. Srikantaiah, *Three Stages of Knowledge Management*, in *Knowledge Management Lessons Learned: What Works and What Doesn't*, M.E. Koenig and T.K. Srikantaiah, Editors. 2004, Information Today, Inc.: Medford, New Jersey. p. 3-8.
- [6] Webber, A., *What's so new about the new economy?* Harvard Business Review, 1993. 71(1): p. 24-32.