

KM/OM/OL Systems and Technologies

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The Systems and Technologies mini-track of the Knowledge Management, Organizational Memory and Organizational Learning research cluster addresses technical issues and tools for building and supporting knowledge management, organizational memory, and organizational learning systems. Sixteen papers were considered in this mini-track. We wish to express our thanks to all of those authors who submitted their work. We would also like to thank the 31 individuals who gave their time and effort in providing reviews of the submitted manuscripts. The mini-track could not exist without their diligent efforts. The six accepted papers describe both conceptual and working systems.

Marlene Davidson and Lorne Olfman examine "The Impact of Information and Communication Technology use on Interorganizational Learning in an IT Outsourcing Collaboration." The study considers three cases to develop theory about interorganizational learning. Information and communication technology use are shown to impact the ability of partners in an organizational relationship to learn. Organizational transparency, organizational receptivity, intent and absorptive capacity were all found to have influenced the levels of interorganizational learning resulting from ICT use in the collaborations; no conclusive support was found for the impact of relative absorptive capacity.

In "Integrating Knowledge Management Systems with Everyday Work: Design Principles Leveraging User Practices" Lindgren and Stenmark contend that information technology can have a positive influence on knowledge application even though results from research on knowledge management systems indicate that such systems often fail when implemented in the everyday practice of modern organizations. This paper shows how knowledge management systems can be designed, developed and integrated with everyday work to leverage user practices to support knowledge work processes.

In "Knowledge development and Creation in E-mail," Sharma Lichtenstein argues that newly created knowledge is increasingly viewed as the most valuable source of competitive advantage for business. This paper explores email in its role as a place of organizational knowledge development and creation. A knowledge development lifecycle is derived from empirical studies,

to provide insight into the nature of knowledge development and creation in organizations. Findings identify the process of knowledge qualification in organizational knowledge creation and development, and suggest that organizational knowledge may be politically constructed. The study highlights the potential for email as a key component in a company's formal KM strategy.

Richardson and Courtney build upon a growing tradition of work based on the systems perspectives articulated by C. West Churchman. Consistent with emerging knowledge-oriented theories of the firm and theories of KMS design, the paper employs Churchman's (1971) inquiring systems as a kernel theory on which to base KMS design. The paper builds on Churchman's nine requirements for an object to constitute a system and his Singerian inquiring system to develop the notion of Churchmanian knowledge management systems (CKMS) and principles for their design. The implications of the design theory for IS research and IS researchers are discussed.

Sharma, Wickramasinghe and Fadlalla provide a case study to offer evidence of the existence of sophisticated, implicit, knowledge assets based around multidisciplinary service delivery. A knowledge management infrastructure model is proffered as a way of making the elements of these knowledge assets more explicit. The model provides a systematic and robust approach to structuring the conceptualization of knowledge assets across a range of business environments.

Croasdell and Wang describe a model for expanding knowledge networks to address changes in the demands on time and interest are so prevalent in an "attention economy." Their paper explores virtue-nets and their advantage in grouping data based on qualitative attributes to support knowledge work. A survey of communication technologies and theories supports the need to develop a network infrastructure to enable intelligent business practices. A network architecture is proposed to support network connectivity using qualitative measures.