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Managing Knowledge and Information in Times of Major Organizational Transition

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Abstract

The goal of this research is to increase our understanding of how organizations mobilize and leverage their knowledge and information (KIM) capabilities during times of significant organizational change. The study pursues three research questions: (1) what formal and informal KIM practices are observed in changing organizations? (2) to what extent do these KIM practices help or hinder the transition process? (3) how can organizations integrate or interface formal and informal KIM practices in order to support organizational learning during times of disruptive change? By major change, we mean strategic organizational transformations such as mergers and acquisitions, privatization, technology disruption, and changes induced by external environmental forces. By knowledge and information practices, we include formal elements such as enterprise portals, as well as informal elements such as information sharing behaviours and communities of practice. As such, the study identifies and analyzes KIM practices that enable organizational renewal and growth in periods of major transition.

Two large organizations are participating in this case study research. Both are presently undergoing major change imposed through external societal forces. The first is a major city organization that recently underwent an amalgamation of its municipalities. The second is a large utility company that is being privatized. Both organizations have relatively long histories and have accumulated significant knowledge, experience, and expertise. Both organizations have also developed sophisticated IT and information infrastructures that are intended to facilitate communications and information sharing.

A variety of data collection instruments are being utilized. The first is a survey to organizational participants with questions adapted from survey instruments developed by Marchand and

colleagues⁴ that measures information orientation, behaviour and values, and by Statistics Canada⁵ on knowledge management practices. The second is an enterprise portal adoption and use survey with questions adapted from the Technology Acceptance Model⁶, the End-User Computing Satisfaction construct⁷, and the Al-Gahtani and King's technology usage construct⁸. The third are one-on-one interviews, based on the critical incident technique⁹, which asks participants to comment on work situations involving both typical and new KIM practices. Interviews are being tape-recorded and transcribed. If possible, enterprise portal logs will be analyzed for patterns of KIM behaviour. Last, various project and work-related documents will be collected as a means of gaining insight on organizational KIM practices.

Data collection is currently underway and expected to be completed by Spring 2004. Analysis will follow thereafter. Factor analysis and regression modelling will be employed to investigate relationships between survey item variables and measures of how well the organizations are doing in managing the change process. The interview and document data will be coded, categorized, and analyzed using qualitative data analysis software. Using both quantitative and qualitative methods, it is expected that these two case studies will contribute to our theoretical understanding of knowledge-driven change through development of an empirically grounded model that links KIM practices to an organization's capacity for learning and adaptation, as well as practical recommendations on how to nurture and integrate formal and informal KIM practices.

⁴ Marchand, D., Kettinger, W., & Rollins, J. (2001). *Information orientation: The link to business performance*. New York: Oxford University Press.

⁵ see <http://www.statcan.gc.ca/english/sdds/5001.htm>

⁶ Davis, F. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, 38, 475-487.

⁷ Doll, W. J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 12(2), 259-274.

⁸ Al-Gahtani, S. S., & King, M. (1999). Attitudes, satisfaction and usage: factors contributing to each in the acceptance of information technology. *Behaviour & Information Technology*, 18(4), 277-297.

⁹ Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327-358.