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Play as a metaphor in building knowledge flow, social interaction and knowledge-based communities : an enjoyable, interaction and involvement way to improve organisational performance

Yan Qi

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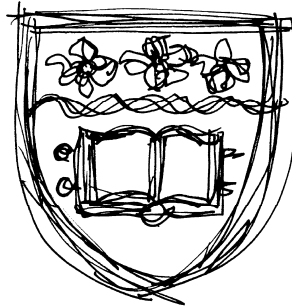
**Play as a Metaphor in Building Knowledge Flow, Social Interaction
and Knowledge-based Communities:
an Enjoyable, Interaction and Involvement Way to Improve
Organisational Performance**

A thesis submitted in (partial) fulfilment of the requirements for the award of the degree

DOCTOR OF PHILOSOPHY

from

UNIVERSITY OF WOLLONGONG



By

YAN QI

MIS (Master of Information Systems)
GIS (Graduate Diploma in Information Systems)

INFORMATION SYSTEMS

2010

CERTIFICATION

I, Yan Qi, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy, in Information Systems Discipline, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Signature of Candidate

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PUBLICATIONS

The following publications and conference papers are related to this thesis:

- Qi, Y. 2010. "The use of team games to enhance the performance of collaborative work." Paper will be presented in the 17th International Conference on Learning, Hong Kong. (*Accepted*)
- Qi, Y. & Meloche, J. 2009. "Enhancing the Use of Flight Simulator Training as a Way to Advance the Knowledge Management." *International Journal of Knowledge, Culture and Change Management* 9(8):153-178.
- Qi, Y. & Meloche, J. 2009. "Enhancing the Use of Flight Simulator Training as a Way to Advance the Knowledge Management." Paper presented in the International Conference on Knowledge, Culture and Change in Organisations. USA.
- Qi, Y. & Meloche, J. 2009. "The Power of Play in Knowledge Management." Paper presented in the International Conference on New Trends of Information and Service Science. Beijing, China.
- Meloche, J. Hasan, H. Pfaff, C.C. Qi, Y. & Willis, D. 2008. "Co-creating Corporate Knowledge with a Wiki." *International Journal of Knowledge Management* 5(2):33-51.
- Meloche, J. & Qi, Y. 2007. "The Use of "Play" and Communication Research for the improvement of work practices." *The Human Factor* 1(2).
- Meloche, J. & Qi, Y. 2007. "Engaging the User in the Development of the Innovation: A Q Methodological Study of the Development of a Wiki." Paper presented in the conference of COST298 Participation in the Broadband Society. Moscow, Russian Federation.
- Qi, Y. & Meloche, J. 2007. "Enhancing students' academic experience through learning communities with the development of a Collaborative Learning Project." Paper presented in World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2007, ed. G. Richards. Quebec City: AACE.

ABSTRACT

Knowledge plays a key role as a source of potential advantage for organisations and, knowledge management provides the means to realise this potential. When the environment is dynamic and complex, it becomes essential for organisations to continually create, store, transfer and apply their past and current knowledge into their products, processes and services for additional value. However, knowledge management is not a simple question of knowledge creation, retention, and transfer; rather, it requires interpretation and organisation of knowledge from multiple perspectives. Therefore, this research brings the concept of play into knowledge management theory and practice in order to give a different and more relevant perspective to the design and implementation of knowledge management initiatives, thereby improving organisational performance.

Play is a human activity that has been widely acknowledged to have significant emotional, social and cognitive benefits, yet its role in organisations has not been comprehensively researched or understood. The aim of this research is to take play seriously in organisations and, to view it as a natural and practical way to engage the knowledgeable workers in knowledge management practices, hence, improving organisational capabilities. The research pursues this aim by examining the question, ‘what are the benefits that play, as practice and as metaphor, can bring to the context of knowledge management?’ To answer this question, the research design involves conducting two case studies. Each of the two case studies involves participants in the purposeful activity of play: the first, an existing simulation training in an organisation, the second, a game that involved the participants in team development.

This research focuses on the improvement, through play activities, of knowledge flows and social interactions, building knowledge-based communities within organisations. The findings of this research indicate that play can be used to explore new ways of building competencies for organisations that leads to the ability to create new knowledge, empowering workers to be adaptable and cooperative. This research provides evidence of the benefits and impact of play in organisations – which cannot be ignored, and, advances the notions that play activities can provide advantages and outcomes not achievable elsewhere. This research establishes a new way to develop

organisational capabilities for dealing with unexpected problems and unforeseen situations.

This research purpose is achieved by a review of relevant literature and subsequently through the use of a research methodology and approach that allows game players, as knowledgeable workers, to state how they understand play, knowledge management practices and the addition of play into knowledge management practices. Metaphor Theory provides a rich, enduring context for carrying out this research. Q Methodology is used as the primary form of research methodology. Activity Theory is also used to frame the analysis and discussion of the results. The integrated application of the concepts and techniques of Metaphor Theory, Q Methodology and Activity Theory make the methodology used in this research as innovative and meaningful as the findings themselves.

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