### **Integrating Knowledge Management into Business Processes**

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A thesis submitted for the Masters degree of Computing Sciences at the University of Technology, Sydney

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#### CERTIFICATE OF AUTHORISATION/ORIGINALITY

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I here declare that the work described in this thesis is the result of original research and has not bee submitted for a higher degree to any other University or Institution.

I certify that all information sources and literature used are described in the thesis.

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### **Abstract**

The 'new economy' enterprises, this thesis explains why knowledge management can fail and how the risk of such failures may be minimised. The key proposal is that knowledge management should be integrated into business processes and software agents should be used to facilitate knowledge management in business processes. The problem then is how such integration of the methodology can be applied to a concrete knowledge model.

#### The Evolving Knowledge Process (EKP) Model

The proposed approach includes these features: firstly, a method for developing a knowledge model; secondly, how the proposed knowledge model can be integrated into business processes; and thirdly, the use of a software agent to facilitate the integration of knowledge management into the business process; and finally, we implemented the EKP model using the Java programming language to demonstrate our system on the computer and to facilitate the use of agents.

#### **Agents to Facilitate the Process**

This thesis suggests how knowledge agents can facilitate the knowledge process. One solution is to develop a multiagent system based on the Evolving Knowledge Process (EKP) model. We defined each agent in the knowledge process to support and facilitate the process. Each agent has its own goals, plans and actions, and communicates with the other agents.