



Business Process Management Research Group  
Faculty of Science and Technology  
Queensland University of Technology

### BPM Seminar Series

#### *The Effect of Cognitive Abilities and Learning Approach on Domain Surface Understanding from a Process Model*

Jan Recker

BPM Group, Queensland University of Technology

[j.recker@qut.edu.au](mailto:j.recker@qut.edu.au)

THU, 17 March 2011, 2.30-3.30pm, QUT, 126 Margaret Street, Level 6, Room 608

**Abstract** Process models are used by information professionals to convey semantics about the business operations in a real-world domain that are intended to be supported by an information system. The understandability of these models is vital to them actually being used. Until now, understandability has primarily been defined as an intrinsic quality of the models themselves. In this paper we conceptualize model understandability as an emergent property and advance an integrative framework to understand the role of the user in the process of understanding process models. Building on cognitive psychology, student learning theory and multimedia learning theory, we identify important factors during the presage and process stages of learning, and hypothesize their contributions to realizing domain understanding from a process model. Through an empirical study, we provide evidence that cognitive abilities, learning style and learning approach influence the development of domain understanding. We detail implications for theory and practice.

**Speaker** Dr Jan Recker is Associate Professor for Information Systems at Queensland University of Technology, Brisbane, Australia, and a Fellow of the Alexander von Humboldt Foundation. His main areas of research include methods for business process design and the usage of process design in organizational practice. His research is published in the MIS Quarterly, the Journal of the Association for Information Systems, Information Systems, the European Journal of Information Systems, Information & Management, the Scandinavian Journal of Information Systems and others. He is an Associate Editor for the Communications of the AIS, a member of the editorial board of several international journals and serves on the program committee of various conferences.

