

# REQUIREMENTS ENGINEERING FOR ORGANISATIONAL MODELLING

Simon Tan, Kecheng Liu

*Department of Computer Science, University of Reading, Whiteknight, Reading, RG6 6AY, UK  
Email: [b.k.s.tan@reading.ac.uk](mailto:b.k.s.tan@reading.ac.uk), [k.liu@reading.ac.uk](mailto:k.liu@reading.ac.uk)*

Keywords: Requirements Engineering, Semiotics, Organisation Modelling, Norms, Semantics, Agents

Abstract: This paper explores a semiotic perspective to information systems engineering, using organisational modelling techniques rooted in organisational semiotics. The components and relationships of large corporations are highly complex, volatile and unstructured. Semiotic modelling techniques are therefore introduced to address these challenges posed by large enterprises. MEASUR, a suite of methods based on organisational semiotics, are used to address the IT and organisational requirements, needed to encapsulate behavioural patterns and to formalise the convoluted relationships. A case study illustrating the applicability of MEASUR is presented, to evaluate a crime reporting system from the Police Information Technology Organisation (PITO) in UK, and to examine its application and significance in the modelling of organisations. We focus on two key fundamental issues. Firstly we investigate the agent behaviour within the organisation. Secondly, we analyse the semantics of the relationships between these patterns of behaviour in building a normative model of a large organisation.