

# Organisational Semiotics for Co-Design of Business and IT Systems

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**Abstract:** There is often a tension between IT and business systems, because of the changing business requirements. An IT system, that at one time may be highly supportive, after some time, could become inadequate to business operations and be regarded as a legacy system. Such a problem may be caused by a number of factors. One is that IT systems and business processes are not treated as one integral unit; and therefore the misalignment between the business and IT systems may occur. Calibration and alignment of IT and business systems have to be regularly performed. Much effort in industry and academia has been made in searching for solutions, through investigation of, e.g., flexible architecture of IT systems, evolutionary information systems and co-evolution of IT systems and business processes. But the results have often been far from being satisfactory. The co-design of business and IT systems introduced in the keynote is an approach towards this direction. An IT system is viewed as a part of the business organisation, and the design of the business organisation will derive the design of IT system, with the IT system design being a by-product. The organic integration of IT into the business processes will allow both systems to evolve naturally. The co-design approach from the perspective of organisational semiotics in this talk will be presented as a methodological foundation for modelling the business organisation. An organisation is analysed and modelled as the informal, formal and automated components which interact and support each other. Modelling the organisation will involve the solicitation and representation of the norms that govern the behaviour in each part. The presentation of this method of co-design will be followed by an illustration of the method applied in integrating the healthcare enterprise, with a discussion on future research.

## BRIEF BIOGRAPHY

Professor Kecheng Liu, Fellow of the British Computer Society, holds a professorial chair of Applied Informatics at the University of Reading, UK. He is Director of Informatics Research Centre, and Head of School of Business Informatics, Systems and Accounting, a constituent school within Henley Business School. He has published 14 books and over 200 papers in the fields of business informatics. As a key international figure in business informatics and organisational semiotics, he was one of the founders and also the chair of a series of international workshops and conferences on Informatics and Semiotics in Organisations. His research interests span from information systems methodology, requirements engineering, pervasive informatics, intelligent systems enabling sustainable working and living, information management in healthcare and, recently, pragmatic web. He has

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