Editorial

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Biographical notes: Professor Lorna Uden teaches Computing at the Faculty of Computing, Engineering and Technology of Staffordshire University, UK. Her research interests include technology learning, HCI, activity theory, knowledge management, web engineering, multimedia, e-business, service science, semantic web and problem-based learning. She has published widely in conferences, journals and chapters of books.

This issue consists of four papers ranging from the design of web user interfaces to B2B collaboration. The first paper is by Falb *et al.* In this paper, 'Fully automatic generation of web user interfaces for multiple devices from a high-level model based on communicative acts', these authors have developed a new approach to modelling and generating web user interfaces. Their approach makes use of communicative acts that allow the specification of user interface on a high-level interaction basis. According to these authors, communicative acts capture three main concepts used for modelling as well as their relations in UI models. These are the:

1 interaction captured by a communicative act

2 the propositional content modelled by use of an ontology language

3 the set of interaction sequences modelled with a finite state machine.

From the high-level models, web UIs can be generated automatically (or semi-automatically). It is good to see research in the design of user interfaces for B2B collaboration. The successful preliminary industrial use mentioned will help to disseminate the wider acceptance of its use.

From web user interfaces, we move on to semantic web services. The next paper by Kumar and Mishra is entitled 'An approach to multi-attribute negotiation between semantic web services'. In this paper, Kumar and Mishra present an approach to Multi-Attribute Negotiation (MAN) between Semantic Web Services (SWSs) based on the utility theory. According to Kumar and Mishra, the main contributions of the paper are:

- a multi-attribute negotiation model for negotiating between SWSs
- the multiple-attribute-based utility model that is based on a novel understanding of the effect of change in quality over the price and response time.

They have implemented a system for the problem of travel booking which provided a negotiation between SWSs using MAN. It would be useful to see more empirical studies to evaluate the effectiveness of the approach.

The next paper is about enterprise service integration. This paper by Srirama and Jarke is entitled 'Mobile hosts in enterprise service integration'. According to these authors, mobile web services enable communication via open XML web service interfaces and standardised protocols. Mobile hosts also enable seamless integration of user-specific services to the general enterprise. Moreover, services provided by the mobile host can also be integrated with larger enterprise services, bringing added value to the enterprise services. While service delivery and management from a mobile host were thus shown to be technically feasible, the ability to provide proper Quality of Service (QoS), especially on terms of security and reasonable scalability for the mobile host is observed to be very critical. In their paper, Srirama and Jarke show that it is now feasible to deliver basic web services from smart phones, due to advances in wireless and communication technologies. In the paper, they look at several technical aspects like providing proper QoS, especially in terms of security and reasonable scalability, discovery of a huge number of possible services and integration issues of providing web services from small phones in mobile enterprise. This research is still in its infancy, so there is plenty of scope for further research in this domain.

The last paper in this issue is by Tan *et al.* Their paper, 'Context-information support for B2B collaboration' is a review of existing literature to gather an understanding of context and how the various elements of context are modelled. It investigates how such context models can be adapted to support partner selection in the B2B collaboration. Tan *et al.* identified three major context aspects from their review:

1 physical

2 cognitive

3 information.

The most dominant aspect is the physical aspect. Under the physical aspect, the major categories of context are user, location, temporal and activity. The physical context elements encompass the cognitive aspect's elements, with the exception of the emotional/mental element from the cognitive aspect. Both the cognitive and information aspects are considered to be irrelevant to be of use in B2B context. According to these authors, a combination of contexts from both the physical context and selection criteria is needed to formulate the B2B context model. Although such a context model is proposed, it would be good to see its actual use.