Special Issue on Information Systems: Healthcare and Mobile Computing

Editor's Editorial

I am proud to have been associated with the *Journal of Computing and Information Technology* since it began in 1993. At that time I was a member of the Editorial Board and co-author of the very first paper in the very first issue. In recent years I have been one of the Editors, which has been more of an honour than a chore. I offered to arrange for a Special Issue on Information Systems to be produced by my colleagues in the Universities for which I am a Visiting Professor: Brunel University and the London School of Economics. Two colleagues at Brunel University agreed to 'volunteer' as guest editors. They are Jyoti Choudrie and Steve Love.

Jyoti and Steve have done such a good job that two special issues will appear, the second in 2005. This the first on Healthcare and Mobile Computing, has 2 papers from the London School of Economics and 4 from Brunel University as well as a Guest Editorial. I hope you enjoy reading these papers as much as I have.

Ray J. Paul

Guest Editor's Editorial

This special issue has two papers on health care by Vasiliki Mantzana and Marinos Themistocleous, and Nayna Patel, Simon Kent and Sarunjit Rai.

In their paper, Mantzana and Themistocleous discuss the advantages of adopting an actor-orientated approach to enterprise application integration (EAI) in the healthcare sector. The results of their case study show how operational services (e.g. data sharing between health care professionals) and organisational issues (e.g. patient waiting times), as well as managerial and strategic dimensions can be improved through the integration of these various healthcare information systems.

The second paper on health care by Nayna Patel, Simon Kent and Sarunjit Rai has a different focus. In this paper, the emphasis is on using information technology to tackle the problem of child obesity. This is a current topic of debate in the national press in the UK with many commentators suggesting that young people's poor diet and preference for spending the majority of their free time indoors, playing computer games, are the main contributory factors to this problem. Patel, Kent and Rai decided to harness the enjoyment young people get out of playing computer games and developed their own computer game prototype designed to increase children's nutritional awareness. The results from their study indicate that the computer game was a relatively effective tool for raising nutritional awareness in young children and also stimulating discussions about the effects of food.

The next section of this first special contains two papers on the mobile work environment by Daniele Pica and Carsten Sørensen, and Adel Al-Taitoon and Carsten Sørensen.

In the first paper, Daniele Pica and Carsten Sørensen, investigated mobile technology use in a workplace environment. In particular, they chose to analyse the use of mobile technologies in the police force (looking specifically at the work of scenes of crimes officers and community security officers). The results of their qualitative case study suggest that when one is looking at the relationship between mobile technologies and the work environment, it is important to consider not only the technical functions that the mobile device will perform, but also the context of use and how this can have an impact on efficacy of the mobile information system.

Continuing on the theme of the mobile worker, the next paper by Adel Al-Taitoon and Carsten Sørensen looks at how ICT's can be used to support the work of call centre operatives in a global banking context. The major problems that mobile banking professionals can face are technology failure or problems with accessing information. This problem is increased when one is operating in a global banking environment and need real-time access to information. In order to deal with these potential problems, Al-Taitoon and Sørensen, suggest that ICT support teams in global banking organisations should offer three distinct phases of support: pre-mobility (e.g. informing professionals of new services or updates to services before they leave for a business trip), in-mobility (e.g. a 24 hour help desk facility) and post-mobility (e.g. information on how to backup data on PDAs, laptops, tablet PCs to the individual's own network space).

The third and final section of this special issue has two papers on telecommunication networks by Philip Olla and Jyoti Choudrie and Yogesh Kumar Dwivedi. In his paper, Phillip Olla describes how various telecommunication networks are converging into what he calls a "Convergent Mobile Infrastructure" environment. Olla adopts a business modelling approach to develop his vision of the future of mobile communication, focusing on the mobile satellite communication sector. There are two main elements to his model: social and technical. The social aspect deals with how network operators can make this new approach attractive to potential customers and the technical aspect is concerned with making sure the various wireless networks converge to meet their technological potential.

The final paper in this section of the paper by Jyoti Choudrie and Yogesh Kumar Dwivedi describes how to evaluate the various models used for studying technology adoption issues by reviewing the extant literature related to the users and/or consumers' adoption of technology. Then the reviewed extant research findings are utilised to develop a coherent and comprehensive picture of the technology adoption research conducted in the IS field. The paper focuses upon broadband as the technology, as this is the current form that is of particular interest to researchers. Finally, the paper introduces a conceptual model that integrates factors from different technology adoption models to study broadband diffusion within the home and from a consumer perspective.

Jyoti Choudrie and Steve Love