
Foreword

Reima Suomi*

Turku School of Economics,
University of Turku,
20014 Turun yliopisto, Finland
E-mail: reima.suomi@utu.fi
*Corresponding author

Sakari Suominen

University of Turku,
20014 Turun yliopisto, Finland
and
Nordic School of Public Health,
P.O. Box 12133, 40242 Gothenburg, Sweden
E-mail: sakari.suominen@utu.fi

Gunilla Widén

School of Business and Economics,
Åbo Akademi University,
Fänriksgatan 3B, 20500 Åbo, Finland
E-mail: gwiden@abo.fi

Biographical notes: Reima Suomi is a Professor of Information Systems Science at University of Turku, Finland and a part-time Professor at Central China Normal University, Wuhan, China. He received his PhD in Information Systems Science in 1990. He is also a Docent of University of Oulu; Finland. He has been a Visiting Researcher at University of Münster, Germany and University of St. Gallen, Switzerland. Currently he concentrates on topics of healthcare IS and telecommunications, including issues such as management of networks, electronic and mobile business, social media in healthcare, virtual organisations, social media and governance structures.

Sakari Suominen is Acting Dean and Professor of Public Health of the Nordic School of Public Health in Gothenburg, Sweden. He is also Docent in Behavioural Medicine at the University of Turku and Docent in Health Oriented Well-being Studies at Åbo Akademi University. His research interests comprise sense of coherence and related concepts and their association with health, public health management and health of children and adolescents. He is also Associated Senior Researcher at the Folkhälsan Research Center where he is leader of a group of four full-time researchers. In these studies, an additional topic comprises comparative research of health and well-being of the Swedish speaking minority and the Finnish speaking majority population in Finland.

Gunilla Widén is a Professor of Information Studies at Åbo Akademi University. She received her PhD in Information Science in 2001. During 2004–2005 she was Visiting Researcher at School of Computing, Edinburgh Napier University. She is Docent in Information Management at University of Tampere. Her research fields concern information behaviour, knowledge management, and social capital and she has lead research projects financed by Academy of Finland investigating key skills in information society as well as various aspects of social media and a changing information behaviour. She has published widely in her areas of expertise and been appointed expert in several evaluation committees.

In August 2012, the fourth Well-being in the Information Society (WIS) Conference was held in Turku, Finland. The special theme for the conference was ‘Exploring the abyss of inequalities’, referring to unequal access to information resources because of various reasons, including disabilities. From the very start of the conference series since 2006 in a biannual rhythm, two principal goals have guided the work, a multidisciplinary approach and an urge to combine theory with praxis. Year on year the local organisers, as well as representatives of the scientific committee, have noted that these goals are gradually being reached, whilst there is obviously still room for improvement.

Based on ratings by external independent referees the programme committee invited selected authors of conference abstracts to offer a manuscript on the same topic. Fourteen of these papers were published in WIS 2012 conference proceedings ‘Exploring the abyss of inequalities’, Vol. 313 of the Communications in Computer and Information Science Series of Springer Verlag in the year 2012. Based on an initial internal rating of members of the programme committee, the authors of seven articles considered to have the greatest developmental potential were invited to offer a new further elaborated version of their manuscript.

Five of those articles have now made it to this special issue. They all have undergone a completely new review process by independent scientific experts of that particular field. The final result gives a nice overview of the variety of topics covered by the conference.

The paper by Eriksson-Backa on ‘The role of online health information in the lives of Finns aged 65 to 79 years’ examines the health information seeking behaviour among elderly Finns, focusing on the frequency of use of internet resources and their preferences for resources. The research data was collected with a mail survey ($n = 281$) and by conducting interviews ($n = 19$). The results showed that the internet is only used to a minor degree for health information among senior citizens. Particularly, the oldest, less educated and persons with long-term health problems virtually do not use it at all. Those who use the internet prefer searches via Google and obtain hits that vary in quality. It is important for health information providers to consider this digital divide.

The paper by Lehto et al. on ‘Virtual health coaching for consumers: a persuasive systems design perspective’ deals with empirical research on the use of a Finnish health portal. A key to assessment is that of persuasion, and how persuasion for healthier life can be implemented in the health portal. The study showed that users’ health and situation of life can vary a lot, and hence, interaction within the system should take this into account. Repeating the same things without concomitant added value cannot be considered a good way to persuade users to adopt good health behaviour. This all adds to

the complexity of the criteria for a good system. The system must be accessible where the user wants it to be but it should not interfere too much with the user's life, i.e., unobtrusiveness is a key issue here. The article also deals with institutionally based trust, and this also applies to a part offering health-related services, in this case persuasive guidance. As known from previous studies perceived usefulness of the system remains a cornerstone for system adoption and continuous use. The article concludes, however, that despite some shortcomings of current persuasive systems, they will adopt an important role in future healthcare.

The paper by Ricciardi et al. on *participative networks for safer living settings* offers a broad framework for success and assessment factors for network design for participative purposes, with examples from electronic participation and government including health but from the viewpoint of public administration, not business. Participatory system design is an important topic within information systems per se but the focus of the paper is in the participatory use of networked systems which might, in the long run, enhance the evolution of the systems. Central conceptual results include 'perceived sense-and-respond capabilities of the network', 'perceived inverse commons nature of the information share by citizens' and 'organisational effectiveness of the problem-solving actors of the network'. These concepts can, with some simplification, be interpreted to tell us that networked systems must work without interruptions, people must give input, authorities must really react to that input, and people must feel that they really get benefit out of using the system. Moreover, the public actor running the system must have effective internal capabilities in order to take benefit from the networked system.

Aviation and healthcare safety are discussed in the paper by Sjöblom et al. on 'Using cluster analysis to identify weak signals of lethal trends in aviation and healthcare documentation. Data mining, and clustering within it, is introduced as a key technique to work out valuable information and knowledge out of flight incident reports and patient records. Healthcare and aviation were selected as examples, as they are high-risk service providers, where mistakes can easily lead even to death. The message of the article is that safety culture is a key organisational attribute both in aviation as well as in healthcare, and that management must be paid thorough attention to. For some reason, safety cultures in these two industries have evolved to become very different, most probably due to different history and organisational background, but now a great potential for benchmarking and mutual learning exists. One key aspect in safety culture is learning from past problems, mistakes and incidents, and for that purpose data mining into free-text data is needed.

Finally, the paper by Murtola et al. on *information management systems in hospitals* is a literature review in order to explore decision-support information systems used by nurse managers in hospitals. The literature reviewed was retrieved from several relevant databases (CINAHL, MEDLINE, ABI/INFORM, IEE Xplore, Cochrane Database of Systematic Reviews) using a number of search terms and combinations of them. The paper shows that several different information and communication systems have been developed to support nurse managers' information management. However, these systems focus mainly on strategic and tactical decision-making which leaves operational decision-making weakly supported. The review also shows that there is little research evaluating how existing systems overall support nurse managers' decision-making. In the elaborated version of the paper, a new theoretical framework has been added giving a

descriptive model of decision-making levels and information management in hospitals giving possibilities for wider conclusions.

We hope these conference proceedings provide a rewarding reading experience. We acknowledge Inderscience for inclusion of these conference proceedings as a special issue of the *International Journal of Networking and Virtual Organisations*.