Mobile Life

Panel Members:

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Living the *Mobile Life* is motivated by and built on knowledge mobilisation, own and others. Knowledge mobilisation has a double connotation: (i) activation of knowledge and (ii) making it mobile.

The numbers involved in most discussions on the applications of mobile technology are huge. The global penetration of wireless phones alone is expected to grow to 1 billion by 2003 (by late 2002 in some estimates). A forecast made by Nokia shows that the potential for WAP users in Europe will be approximately 180 million by the year 2002; the number of WAP users globally will be approximately 600 million. Lately, there has been some doubt if WAP will eventually make it through the GPRS standard or if we are going to get only tailored user applications. Overall, whatever the solutions will be, this amounts to a huge market for Internet business products and services, on a much larger scale than we have been able to envision with the present e-commerce technology. The mobile technology requires that we find ways to build new value added products & services, which would work on the mobile devices and which would make it easy to adopt (600 million people represent the general population) new business principles.

Mobile technology is making inroads in e-commerce, turning it into an emerging mobile commerce, around which there already is considerable hype, with excited

talk about *killer applications*. Mobile technology will, however, offer much more: mobile platforms are being built for personalised decision support at the point of decision making, as support for problem-solving as problems appear, as platforms for mobile health care, as support environments for virtual teamwork, as personalised and interactive time management platforms, etc. This amounts to new and innovative ways for us to improve on and enhance the everyday routines we have invented to simplify and organize our lives. In this way, mobile technology will probably impact our world in profound, new ways, which will have consequences for both business and society.

Research in mobile life applications should focus on (i) building and testing new, effective products & services, and (by critically evaluating results) (ii) finding generic products & services, which will both offer significant value added substance to the customers and means for companies to build a growing profitable business. It is anticipated that there is not ONE customer group for mobile life applications but many different customer profiles, having their origins in different social and cultural backgrounds. They are reflected in particularities in the using behaviour, in the purchasing habits, in the need for support and in the attitudes towards issues like privacy, security and trust. It is essential that such profiles be identified and acted upon by both the present and future mobile life applications.

Mobile commerce will not grow as a viable business unless products & services have true value added properties in terms of localisation, personalisation, timeliness, convenience and ubiquity. This insight now starts to emerge but ways to resolve the dilemma of building products & services with these properties at an affordable cost to the users are not known. *Mobile education* will become a success when the substance to be taught can be offered through mobile devices and platforms in a timely way without undue reduction of form and content. *Mobile e-health* may become a success when the logistics involved in medical information exchange and use is resolved in a way, which satisfies security concerns. For all three focal areas we will need a good payment system standard.

The design of *mobile commerce* products & services should aim at an integrated, value-adding chain from the producer to the end-user. *Mobile education* applications should be built as an integrated chain from the teacher to the student offering value added provisions for the teacher, the students and the administration in managing the education process. *Mobile e-health* will show logistical benefits for the health care organisations if the chain can be integrated with value adding interfaces from end-to-end.

It is intuitively appealing to try to build the products and services of the m-commerce domain with advanced, intelligent information technology for several reasons.

First of all, the m-commerce domain requires fast planning, problem solving and decision-making, and intelligent support technology will reduce both the number of errors and the magnitude of the errors.

Secondly, support should be available at the moment of decision-making, in an appropriate form and with the best possible substance.

<u>Thirdly</u>, intelligent information technology is a variety of technologies, ranging from machine intelligence, through artificial neural nets, genetic algorithms and case-based reasoning to soft computing, which is built on fuzzy logic, approximate reasoning and computing with words.

Intelligent information technology appears to answer the call for *flexibility*, *localisation, personalisation, timeliness, ubiquity* and *bundling*, which have emerged as key value adding features of mobile technology based products and services. Most of the elements described for these features can be produced with the *software agent* technology and soft computing methods. At the end of the day, mobile life applications are information systems.

The panel will consist of:

Professor Christer Carlsson, IAMSR/Abo Akademi University, *moderator*

Dr Peter G.W. Keen, Keen Innovations

Professor Doug Vogel, City University of Hong Kong

Professor Pirkko Walden, IAMSR/Abo Akademi University

The panel will both report on a series of empirical studies on mobile technology, which have been carried out in Finland, Germany, France, Hong Kong and Singapore, and then through the discussion build a foresight scenario of possible developments to be expected in the field in the coming 3-5 years.