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Americas Conference on Information Systems (AMCIS)

December 2004

PANEL - Mobile Wireless Services and Technology: Evolution and Trend

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Recent development of mobile wireless services, technologies, and mobile devices has contributed to the rapid growth of mobile business (m-business). While e-business continues to impact the global business environment, the focus has been directed towards wireless mobile computing. Given this trend, telecommunications is perhaps the key to all interconnection, information systems, and mobile devices. While countries such as Japan, Korea, and many European nationals are moving quickly and successfully in developing and establishing mobile business markets in the telecommunications industry, the United States has found itself somewhat behind in the race to establish a functional and supportive infrastructure for m-business.

Mobile business services and applications are parallel with the development of wireless technologies. The capabilities of wireless devices will determine the type of frequency of the m-commerce applications. TDMA, CDMA, GSM and analog are four major types of existing access technologies. Expanding on the existing wireless network technology, 3G mobile networks offer broadband transmission with speeds of up to 2Mbps in some areas of the world, but the international 3G networks standard known as IMT-2000 defines no less than 5 incompatible 3G wireless standards. The existence of these multiple standards is complicating the well-known problem of interoperability of wireless networks.

The purpose of this special session is to present "mobile wireless services and technology: Evolution and Trend." Invited panelists will deliver various topics including
- Main evolution into wireless fundamentals (AMPS, GSM, cdmaOne, GPRS, cdma2000, W-CDMA)
- Wireless technologies, applications & value chain evolution
- M-business: economy driver or a mess?
- Wireless mobile issues – security, authentication, and other issues
- Issues of worldwide mobile services and trends
- Current and future efforts in introducing equipment in the mobile environment (NYPD)
- The Wireless/Mobile World: what have we learned? Where still don't we know?

 "With worldwide cellular phone ownership set to outstrip PC ownership and no sign of abatement in users' desires fro online services, the emerging era of mobile commerce promises to permeate all areas of business and private life with vital and valuable services. This presentation addresses several issues of worldwide mobile wireless services, renewal of the handset as push and/pull, wireless mobile user satisfaction, and trends. - J.P. Shim

"There has been a lot of progress in wireless networks and infrastructure. We will present a discussion of several current and emerging wireless networks such as celluar/personal communications systems/GSM, 3G, Generalized Packet Radio Service, bluetooth, HIPERLAN, IEEE 802.11. We will also attempt to cover satellites, fixed wireless and wireless LANs. The discussion should also include the limitations and applications of these networks and also how these networks fit in the mobile and wireless information systems." – Upkar Varshney

"Is m-business economy driver or mess? There appears to be two business models: a small business model, which make sense, and a big business model, which has yet to be proven. For example, highly frequented areas such as airports have a

potential to make service profitable, but they need significant investments and industrial grade service and support"– Sasha Dekleva

 "The wireless industry is in a state of transition. Wireless service consisted of primarily voice services for more than a decade. In today's market, the services include text messaging (data), Internet browsing capability, games, multimedia and point to point communications services. Wireless communications are replacing the traditional wireline services and are a competitive threat. Prices are dropping and the packages of bundled minutes provide sufficient time for the average Consumer to comfortably use the service without receiving a bill with "sticker shock". The included Long Distance minutes in plans make the services even more attractive." – Geoffrey Knoerzer

 "The CIO of New York Police Department (NYPD) will talk about their current and future efforts in introducing equipment in the mobile environment, e.g., laptops in police cars, as well as what they are doing in WiFi and how they are integrating the new technologies" – V. James Onalfo

"Why is the U.S. behind the rest of the world in the innovative use of wireless technology and applications? With UMTS being implement in other parts of the world and extensive use of such systems as iMode in Japan and WAP in Europe, the U.S. continues to trail rather than lead the mobile world. This discussion will look at the global issues that confront the proliferation of wireless technology and applications and where the U.S. fits into the global picture"– Robert C. Nickerso