Wireless Mobile Collaboration

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The focus of this mini-track is on the rapidly changing and evolving use of wireless mobile computing technologies for human-to-human and human-to-machine collaboration. This mini-track is intended to provide a forum for reporting the results of research focusing on system and application development and technology usage as well as the reporting of user adoption, deployment, acceptance, and diffusion among academicians and practitioners in the computer-based system sciences. As such, the wireless mobile collaboration mini-track focuses on the conceptual design, implementation, use, and evaluation of wireless mobile computing technologies in controlled, organizational and broader societal settings.

We include three papers to be presented as part of this mini-track on mobile wireless collaboration. The first paper is by Krebs, Ionescu, Doronhanceanu, and Marsic entitled, "The DISCIPLE System for Collaboration Over the Heterogeneous Web." In this paper the authors examine a central issue in wireless mobile collaboration – sharing and manipulation of information using different display capabilities on diverse devices. The authors present a framework for building wireless mobile collaboration applications for clients with heterogeneous display and processing capabilities. Based on the development and testing of collaborative applications, the results indicate that the framework is scalable, offers good performance, and has a high degree of code reusability.

The second paper is by Sarker, Urbaczewski, and Wells entitled, "Understanding Hybrid Wireless Device Use And Adoption: An Integrative Framework Based On An Exploratory Study." Based on data from a set of exploratory interviews, the authors develop an integrative framework for identifying key enablers and inhibitors that influence the process of use and adoption of hybrid wireless devices. The results show that a variety of intended and unintended consequences related to use and adoption of these technologies emerged. This paper highlights the complex nature of the use and adoption process and provides a map for future researchers to identify, isolate, and study the relationships among various factors influencing use and adoption.

The third paper is by Davis, Zaner, Farnham, Marcjan, and McCarthy entitled "Wireless Brainstorming: Overcoming Status Effects in Small Group Decisions." This study explores how a simple and inexpensive GDSS on a wireless handheld device can augment face-to-face group decision making by mitigating the adverse impact of status differences. Using an experimental methodology, the authors manipulate status through the nature of the task and the proportions of men and women in the groups. The results suggest that a wireless GDSS can be used to reduce social bias that influences face-to-face decision making tasks in small groups.

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