Introduction to the Telemedicine minitrack

Tung X. Bui
University of Hawaii at Manoa
Department of Decision Sciences
College of Business Administration
Honolulu, Hawaii 96822
Tbui@cba.hawaii.edu

As a new discipline, primarily driven by technology, telemedicine is still searching for a coherent research framework. The number of papers submitted for this year’s minitrack has significantly increased from last year. However, the quality of submitted work has yet to be improved. Data gathered for submitted papers oftentimes remain unclear and inconclusive. Technology surveyed in some papers has already been outdated. And the evaluation framework proposed by some other papers lacks some adaptation to the new reality of healthcare via telemedicine technology. The three accepted papers has nonetheless proved that telemedicine research could reach a quality equal to that of other disciplines despite of the newness of the field.

The first paper from Ramesh and Tiwana addresses a classic design paradigm in a distributed telemedicine decision-making environment. They raise an important issue about the efficiency of information retrieval and management. More importantly, they address the problem of effective delivery of timely and relevant information for team-based decision-making and knowledge transfer.

Sankaran and Bui complement the first paper with an almost ideal setting for telemedicine application, i.e., delivering healthcare in correctional institutions. An interesting innovation in their paper is the concept of distributed processing using intelligent agents for Web-centric telemedicine system. A significant contribution of their paper is to successfully demonstrate the potential use of ActiveX programming as a computing platform for implementing distributed multiple experts in a complex geographically dispersed diagnostic session.

Hu, Chau and Sheng take an organization’s perspective when searching for clues for telemedicine adoption. While telemedicine technology is slowly taking shape, it is rather a challenging task to get it fully implemented and used by the healthcare community. The authors propose a research model to explore organizational adoption of telemedicine technology. Three major pillars of their model are: the technological attributes (i.e., perceived ease-of-use, technology safety, perceived tasks and benefits), the extent to which the healthcare organization is ready to adopt and use a new technology, and the external environment.

The three accepted papers are very different in research focus, approach, and findings. All together, they represent however an excellent example of solid research contribution to the new field of telemedicine.