

## Introduction to the Minitrack on Standards and Standardization

Joel West  
San José State University  
<Joel.West@sjsu.edu>

Rolf Wigand  
University of Arkansas at Little Rock  
rtwigand@ualr.edu

Standards are essential for enabling interoperability in complex IT systems, and thus have a direct impact upon an organization's IT function. Interorganizational standards enable the coordination between firms in an industry and between suppliers and customers. Vertical standards promote coordination and coordination among organizations in a specific industry sector. Internal standardization both enables the creation of a common enterprise architecture and constrains future choices made in systems design and procurement.

Therefore, in issuing the call for papers for the Standards and Standardization minitrack, we asked authors to focus on three main areas: inteorganizational standards, vertical industry standards and internal standardization.

A key issue moving standardization today from computer science to information systems is the maturation of lower-level infrastructure technology standards, at the same time there is an explosion of standardization activity further "up the stack", closest to users and business processes. The first two papers directly reflect this trend.

The first paper, by Beomijin Choi, T.S Raghu and Ajay Vinze, considers the process by which IS interorganizational standards are developed. While much of the work on standardization bodies has been case studies on *de jure* (or quasi-*de jure*) formal standardization, these authors look at the standardization process of the ebXML project sponsored by OASIS, a leading industry consortium for e-business standardization. Using social network methods to analyze e-mail archival data, they demonstrate two key structural differences between the business process (higher level) and infrastructure (lower level) standardization efforts: within the same standards stack, the higher-level standards groups are both more cohesive and have a sharper definition of in-group/out-group boundaries.

The second paper, by Robert van Wessel, Pieter Ribbers and Henk de Vries, examines internal IS standardization from the standpoint of one corporate function, human resources. As we noted in our call, internal standardization is an important and under-researched topic in standards research. By looking at a particular function's standardization issues, this paper moves our consideration of internal standards beyond infrastructure (plumbing) technologies to include more domain-specific applications. In this regard, this parallels the increasing research on vertical industry standards, research to which Rolf has both contributed and help nurture — including his co-editing the recent special issue of *Electronic Markets* (Vol. 15, No. 4) on vertical industry standards.

The final paper, by Lin Lihui and Nalin Kulatilaka, revisits one of the most fertile areas of standards research over the past two decade, the role of positive network effects in the economics of standards competition. Use a combination of game theory, closed form solution and numerical methods, they predict the conditions under which standards creators and licensees will prefer fixed versus variable license fees for standards licensed to other implementers.

This is the third time that a standards minitrack has been organized at HICSS. The first one was organized by Kai Jakobs at HICSS-34 (2001). The second one was organized last year at HICSS-38, and three papers from the minitrack were published in the January 2006 issue of the *International Journal of IT Standards & Standardisation Research* (Vol. 4, No. 1). We hope to repeat the minitrack in future years; for more information on past or present standards minitracks, see <http://www.joelwest.org/HICSS/>.