

▼ Introduction to the Standards and Standardization Minitrack

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This is the fifth year (and fourth consecutive year) of the minitrack on Standards and Standardization. The minitrack begun at HICSS-34 by Kai Jacobs and resumed at HICSS-38 by Joel West and Henk de Vries has now become an annual institution. Archives of the minitrack can be found at <http://www.JoelWest.org/HICSS>.

Standards continue to remain central in the development and deployment of IT infrastructure shared across and between organizations and individuals. The promise of interoperability provided by standards is what enables a wide range of interorganizational computing services, including both lower level, semantics-free transport mechanisms like the Internet and higher-level application- or industry-specific higher level computational processes such as the use of vertical industry standards in supply chain coordination.

At the same time, standards have become also important within organizations, as organizations must combine commercial and internally-developed systems to create enterprise IT architectures. As with interorganizational systems, interoperability is not only the norm but a prerequisite for the success of such systems.

Both types of standards are borne out of some sort of standardization process. For small and medium enterprises, internal standardization may reflect the informed (or uninformed) choices by one individual in selecting externally sourced technologies. For large organizations, it often requires mediating multiple and heterogeneous requirements and concerns across functions, divisions and levels of the organization. For interorganizational standards, the standardization process typically entails millions of dollars spent by firms seeking compromises between technical efficiency and economic advantage in the creation and use of standardized technologies.

The interest in standards and standardization in the computer industry has been an ongoing for more than four decades after the early emergence of standards for data interchange codes and programming languages. In parallel, international cooperation in IT standards has built institutions developed for assuring interoperability of the global telecommunications infrastructure and, professional

associations such as the IEEE. Professional journals such as those published by the ACM and IEEE have carried multiple articles on the technical content of standards throughout this period.

Research interest in the managerial impacts of standards is comparatively recent. Economists studied the dynamics of network industries during the 1980s, while management and information systems researchers considered these topics beginning in the 1990s. In 2002, the first journal entirely about IT standards was created: *International Journal of IT Standards & Standardization Research*. The greatest visibility for the topic came in August 2006, with the publication of a special issue of *MIS Quarterly* edited by Kalle Lyytinen and John L. King.

This year, we are pleased to present three papers on IT standards in the minitrack. All three focus on the adoption of interorganizational standards for information technologies.

The first paper, by Yves Bartlette and Vladislav Fomin, considers the gap between standards creation and standards adoption in IS security. Using data from small and medium sized firms in France, they offer policy implications for how international standards could be made more relevant and valuable to fuel organizational adoption.

The second paper, by Roman Beck and Daniel Beimborn, simulates the impact of network effects upon the EDI adoption in Germany. Their study suggests that the role of direct- and indirect-network effects in standards adoption changes over time, and thus standards diffusion should consider these effects separately at different times during the adoption process.

Finally, Alok Gupta, Robert J. Kauffman and Amy Ping Wu present an econometric model on the propensity of firms to join standardization efforts. Using data from five standardization organizations in the electronics industry, they show that R&D intensity predicts standardization participation among 1,271 potential firms.

We wish to thank our reviewers for continuing to provide knowledgeable feedback for the minitrack, and our authors for submitting and refining these papers.