

## Methods and Approaches in Organizational Systems Research Introduction to the minitrack

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Methods and approaches in organizational systems research are important when the challenge is to implement information technology effectively to support organizational systems. An understanding of organizational systems may be achieved through the use of research methods that 1) use theories to describe organizational systems, 2) provide sets of tools to enable real world problems to be addressed, and 3) enable the researcher to interact with the organizational systems that they study. At the same time it is also important to be able to isolate those key factors that affect the success of organizational systems. This mini-track presents six very unique papers that address salient aspects of research in organizational systems and technology. They cover the spectrum from qualitative research methods that describe and explore organizational systems to quantitative research methods that enable theory to be tested and operationalized into measurable constructs.

The first paper, *Researching Organizational Systems using Social Network Analysis*, by Michael Zack provides a clear and insightful discussion of how social network analysis may be used for describing organizations and for measuring the effects of organizational systems. Using examples, it considers the value that information systems have in addressing social networks. The social communication structures have implications for the performance effectiveness of organizational systems. Further insights are provided for the support of virtual network organizations.

The second paper, by Suprateek Sarker, Fancis Lau and Sundeep Sahay, uses grounded theory to analyze virtual teams and provides the reader with further insights into strengths and weaknesses of this research methodology. Its title is *Building an Inductive Theory of Collaboration in Virtual Teams: an Adapted Grounded Theory Approach*. It also presents a meta-framework through which researchers studying IT enabled organizational forms may be guided. A characteristic of this paper and the resulting framework is its theoretical sensitivity leading to insight into the processes of virtual teamwork.

Conducting research in organizational systems often means that researchers are faced with dynamic changing

environments in which they need to produce practically relevant knowledge. This may mean that researchers need to tap into the knowledge of the experts that they study in order to understand IS related phenomena. The third paper in this mini-track: *Shared Sensemaking from Expert Discussions: A Methodology for Exploring Complex MIS Issues* by Larry Seligman, and Reuben McDaniel proposes a methodology to do just that. They use this methodology in a healthcare setting and provide recommendations as to what kinds of topics and situations their methodology is suited for and what it adds to understanding a central issue.

The fourth paper takes the idea of understanding and facilitating the development of expertise and integrating it in organizational systems' development further. *Revealed Causal Mapping as an Evocative Method for Information Systems Research* by Kay Nelson, James Nelson and Deb Armstrong, considers revealed causal mapping to capture and represent knowledge. Revealed causal maps are also seen in this paper to facilitate the transformation from qualitative to quantitative inquiry.

*Fragmentation of Working Time and SMARTER IS-Solutions* by Franck Tetard, uses action research to investigate the impact of information technology on managers' and knowledge workers' productivity. It illustrates how interacting in a situation where the objective is to reduce the negative effects of interruptions can be investigated from the 'inside'.

The last paper in this mini-track is by Efraim Turban, Duanning Zhou, and Jain Ma and is entitled: *A Methodology for Evaluating Grades of Journals: A Fuzzy Set-Based Group Decision Support System*. This paper tackles an illusive and challenging issue in organizational systems research by providing a methodology and decision support system for evaluating journals. It provides a fuzzy set-based group decision support model that integrates objective and subjective evaluations to provide a comprehensive method for evaluating grades of journals.