

MINITRACK

Designing Collaboration Processes and Systems

Gert-Jan de Vreede

*University of Nebraska at Omaha &
Delft University of Technology
gdevreede@mail.unomaha.edu*

Robert O. Briggs

*University of Arizona &
Delft University of Technology
bbriggs@groupsystems.com*

Research shows that, under certain circumstances, groups using collaboration technologies can be far more productive and satisfied than groups using other means to accomplish their tasks. However, experience in the field suggests that organizations do not tend to become self-sustaining with collaboration technologies until they incorporate them into their daily work practices, in support of mission critical tasks that are guided over and over again by the practitioners themselves, rather than facilitated by an outsider facilitator. The challenge for researchers and practitioners alike is to design sustainable processes and systems within and between organizations that allow people to collaborate successfully. This challenge has many dimensions, including a technical, a behavioral, an economical, and a political.

The minitrack on Designing Collaboration Processes and Systems provides one of the key international platforms on which the following issues can be discussed:

1. Methods & techniques to improve collaboration between co-located and distributed people, working synchronously or asynchronously.
2. The design, application, and evaluation of collaborative technologies that support (inter)-organizational collaboration and coordination.
3. Theoretical foundations and practical approaches to model and design collaborative work arrangements.

This year's minitrack Patterns brings together a diverse set of papers. Out of a total of 24 submissions, 9 were accepted to the proceedings. Together these papers cover a broad range of interesting topics. The minitrack has been structured into three sub-themes. In the first sub-theme, 'Collaboration processes', the authors present account of the design and evaluation of mission critical, repeatable collaboration processes.

Krowne and Bazaz, in their paper, *Authority Models for Collaborative Authoring*, describe different authority models that address control issues in collaborative writing processes. The paper, *Increasing Inspection Efficiency through Group Support Systems: An Examination of Causal Factors*, by Rodgers, Dean, and Nunamaker, presents an analysis of collaboration tools and processes in the context of software inspections that follow the Fagan method. In their paper, *Designing Mobile*

Information Services: User Requirements Elicitation with GSS – Design and Application of a Repeatable Process, Den Hengst, Van de Kar, and Appelman show and evaluate how user requirements can be gathered through a repeatable collaboration process that is supported by thinkLets and GSS.

The second sub-theme concerns adoption and diffusion of collaboration processes and practices. De Vos, Ter Hofte, and De Poot kick this sub-theme off with '*IM [atWork] – Adoption of Instant Messaging in a Knowledge Worker Organization*'. They study the adoption of instant messaging during a 7 month period and uncover a number of factors to explain differences in adoption behavior. In '*A Tale of Two Cities: Case Studies of GSS Transition in Two Organizations*' Agres, De Vreede, and Briggs present a field study of the efforts in two Dutch organizations to create a self-sustaining GSS facility. The last paper, '*Recurring Patterns of Facilitation Interventions in GSS Sessions*' by Kolfshoten, Appelman, Briggs, and De Vreede, reports on a study of GSS facilitation practices. Through historical analysis of organizational GSS sessions the authors uncover recurring facilitation practices that can be codified for future use.

Finally, the third sub-theme presents an intriguing account of experiences with collaboration processes and systems from the field. Harder and Higley report on the use of GSS and thinkLets to support WagonWheel interview processes in '*Application of thinkLets to Team Cognitive Task Analysis*'. In '*Open audio/video links as means for coordination – two case studies*' Maria Normark gives an insightful account of the use of continuous audio/video to support collaboration in distributed air traffic control. This year's minitrack is concluded with '*Infrastructuring for the Long-Term: Ecological Information Management*' by Karasti and Baker which gives an in-depth look at supporting collaborative ecological research.

Each of these papers discusses different collaboration technologies and different collaboration processes. Each offers a unique contribution to our understanding of how software tools can be developed and deployed in support of mission critical collaborative tasks. We commend them to your reading.