

Introduction to Designing Collaboration Processes & Systems Minitrack

Gert-Jan de Vreede
University of Nebraska at Omaha &
Delft University of Technology
gdevreede@mail.unomaha.edu

Robert O. Briggs
University of Nebraska at
Omaha
rbriggs@mail.unomaha.edu

Gwendolyn L. Kolfshoten
Delft University of
Technology
G.L.Kolfshoten@tudelft.nl

Collaboration has become a fundamental part of organizational life, and its importance increases still. Recent trends in the use of socialware, collaborative learning, and virtual teams show that there vastly increasing number of research challenges ahead to support groups and teams in effective collaboration. It is therefore critical that collaboration processes are of high quality in various aspects such as productivity, efficiency and effectiveness. A group of people trying to collaborate face many challenges such as resolving disagreements, misunderstandings, information overload, and distractions. Groups are not likely to overcome these challenges on their own. To help groups to address these collaboration challenges, process and technology support can be offered to support groups to structure and focus their effort on efficient and effective goal achievement.

One of the directions in collaboration processes design is Collaboration Engineering. In Collaboration Engineering we study interventions in group work. The thinkLet concept development is one of the key advances of Collaboration Engineering research. The thinkLet concept offers a pattern language for design, describing interventions and their effects, which can be used as building blocks for process design. However, since thinkLets essentially describe a cause and effect, they can also be used as a research lens.

Another critical development in collaboration process design is research on cognitive implications of collaborative activities. Collaboration requires creation and integration of knowledge, and as such many collaborative activities will have a high cognitive load by nature, which can reduce efficiency.

A critical development in system design is the design of systems that can be used by large virtual groups and teams. Several papers will

address the use of wiki's, large scale collaborative spaces, and virtual communities, and the challenges that occur in these settings. We see that more advanced collaboration support systems become integrated not only in office support but also in more specific settings such as gaming, crisis management and product engineering.

In this minitrack, we also present papers that cover in depth analysis of fundamental patterns of collaboration. A shift in focus is emerging from the more 'simple' patterns such as generation and evaluation to the more challenging patterns such as organizing, convergence, and conflict resolution in decision making, as addressed in this year's minitrack. Each of these patterns poses challenges for collaboration process and system design.

Several of this year's papers address higher level challenges in collaboration such as workflow design and e-sourcing.

The papers in this minitrack discuss different collaboration technologies and different collaboration processes. Each offers a unique contribution to our understanding of how software tools and methods could be and should be developed and deployed in support of mission critical collaborative tasks. We commend them to your reading, and hope they will inspire your research and practice.