

Mini-track: Distributed Group Support Systems (DGSS)

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This year represents the eighth consecutive year of the Distributed GSS mini-track. From the topics examined—change management, activity theory and intra-group diversity—to the methods employed—lab experiments, field studies and case studies—to the approaches taken—positivist, interpretivist and participative—the seven papers accepted this year represent a rich diversity of offerings and a sure sign that the field is indeed maturing.

Three themes characterize the material presented in the seven chosen papers:

- The diversity of development methods used in developing Distributed GSS tools;
- The range of impacts—from positive to negative, and from anticipated to unanticipated—when Distributed GSS tools are introduced in different environments; and
- The importance of group processes and structures in affecting group outcomes.

Each of the papers in the mini-track that cut across these themes is summarized below.

01 Tuikka - Activity Theory is used to analyze situated interaction for purposes of developing a design approach that has designers and users interacting to co-construct a design reality. The process leads to shared virtual prototyping.

02 Nilsson, Josefsson and Ranerup - This is an empirical study investigating the management of *unanticipated* change—as contrasted with the management of *anticipated* change—when introducing groupware into a highly structured organizational environment.

03 Ocker - This study examines outcome quality and creativity as well as process satisfaction and group development in distributed groups engaging in strictly asynchronous interaction versus groups supported by a combination of face-to-face and asynchronous communication.

04 Huang and Lai - Citing a large body of research which indicates that GSS tend not to enhance group satisfaction, this study examines whether embedding a team-building framework in a GSS can enhance decision quality and process satisfaction. The answer may help explain the results of earlier research.

05 Anderson and Hiltz - Group process and consensus were studied in culturally heterogeneous versus culturally homogeneous groups. The interaction occurred in both co-located and distributed contexts.

06 Burke and Aytes - Interaction analysis is used to assess how groups develop procedural structures over time. Further analysis examines the groups' perceptions about their behaviors and their satisfaction with the structures generated.

07 Valin, Francu, Trefftz, and Marsic - This paper describes a series of experiments that assess the effectiveness of viewpoint sharing in collaboration by the use of a 3-D view-sharing tool compared with the use of telepointers.

This year's selection of papers attests to the fact that as Distributed GSS technologies grow and mature, so must the methods used to study them. The rapid advances in mobile computing and wireless networks offer rich new grounds for future Distributed GSS research.