

## SPECIAL ISSUE ON INTENSIVE RESEARCH IN INFORMATION SYSTEMS: USING QUALITATIVE, INTERPRETIVE, AND CASE METHODS TO STUDY INFORMATION TECHNOLOGY—THIRD INSTALLMENT; FOREWORD

**By: M. Lynne Markus**  
Senior Editor, Special Issue

**Allen S. Lee**  
Senior Editor, Special Issue

This is the third and final installment of the Special Issue on Intensive Research in Information Systems. In it, we are pleased to publish two articles: "Understanding Software Operations Support Expertise: A Revealed Causal Mapping Approach" by Kay M. Nelson, Sucheta Nadkarni, V. K. Narayanan, and Mehdi Ghods and "Understanding GDSS in Symbolic Context: Shifting the Focus from Technology to Interaction" by Abhijit Gopal and Pushkala Prasad. The first installment of the Special Issue, appearing in the March 1999 issue of the *Quarterly*, presented "GIS for District-Level Administration in India: Problems and Opportunities" by Geoff Walsham and Sundeep Sahay and "A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems" by Heinz K. Klein and Michael D. Myers. The second installment, appearing in the March 2000 issue, presented "A Confessional Account of an Ethnography About Knowledge Work" by Ulrike Schultze and "Understanding Computer-Mediated Discussions: Positivist and Interpretive Analysis of

Group Support System Use" by Eileen M. Trauth and Leonard M. Jessup.

The aim of the Special Issue has been to publish exemplary reports of intensive research, giving particular emphasis to studies that deal with knowledge. The editorial objectives of the Special Issue have required each accepted article to make a substantive contribution to the field of information systems, to identify the appropriate criteria by which to judge the intensive method used, and to show how the investigation meets those criteria. Both articles in this issue make important contributions in the substantive domain of knowledge and its management and in the area of research methods.

The article by Nelson and her colleagues tackles the important issue of expertise in software operations support (loosely called "maintenance"). Prior theory about expertise and specifically IS expertise exists, but Nelson and her colleagues found it too general to inform practical decisions about the selection, assignment, and development of support personnel. By using the innovative method of "revealed causal mapping" (an essentially qualitative approach that involves some quantitative analysis), Nelson and her colleagues found that the components of support expertise vary in different support environments; they also

found some important components of support expertise not identified in prior expertise research. In addition to its practical implications, this work makes an academic contribution by showing the utility of, and need for, substantive or "mid-range" IS theories. To build theories that incorporate *both* general theory imported from other disciplines and important aspects of the IS context is a critical challenge facing our field, and Nelson and her colleagues have shown us one way to face it.

The article by Gopal and Prasad substantively addresses the use of group decision support systems, a technology much studied in IS research for its potential to augment knowledge work. Gopal and Prasad focus on the ways people make sense of their experiences of using these systems and argue that the symbolic aspects of GDSS use can explain the contradictory findings of prior research. The rich description and interpretation provided by Gopal and Prasad are a wonderful complement to the many positivist studies of group support systems. Together with

the Special Issue article by Trauth and Jessup, also on the topic of group support systems, this paper will help redefine GDSS research.

The articles by Nelson and colleagues and by Gopal and Prasad, like those of Walsham and Sahay, Klein and Myers, Schultze, and Trauth and Jessup, are important for their methodological, as well as for their substantive, contributions. They are suited to serve as exemplars for researchers who are seeking to conduct intensive research in information systems, as well as for editors, reviewers, professors, and doctoral students seeking explicit guidance on how to assess the quality of qualitative research.

Because this is the final installment of the Special Issue, we would again like to acknowledge the essential contributions of the Special Issue associate editors: Richard L. Baskerville, Richard J. Boland, Robert D. Galliers, Lynda Harvey, Kalle Lyytinen, Michael D. Myers, Wanda J. Orlikowski, Brian T. Pentland, and Karen Ruhleder.