

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

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This is the first installment of the Special Issue on Intensive Research in Information Systems. In it we are pleased to publish two articles: "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. In future issues of *MIS Quarterly*, we will publish additional installments. (We have also accepted a third article for publication: "A Confessional Account of an Ethnography about Knowledge Work" by Ulrike Schultze. Six articles out of our original 50 submissions are still in the review process.) By publishing the Special Issue in several installments, we hope to increase its visibility while releasing ourselves from the normal page limits imposed by a single physical issue. (It also helps us increase the timeliness of publication for the papers accepted early.)

### The Aims of the Special Issue

We had four goals for the Special Issue—two stated in the Call for Papers, two unstated. Our

stated goals were to publish exemplary reports of intensive research and to give particular emphasis to studies that deal with "knowledge," as opposed to information. Our two unstated goals were to expand the acceptance of intensive research in the information systems field and to help us all get "beyond method."

### *Exemplary Empirical Studies*

Our first stated goal was "to promote intensive research by publishing empirical studies . . . that can serve as models ('exemplars') of how to do intensive research, and that will illustrate the criteria by which such research can be judged." Our starting assumption was that what is often called by the category name of "qualitative research" or "interpretive research" is not one method, but many methods, each with its own appropriate *and different* criteria of evaluation. For example, the positivist case study research strategy, as described by Yin (1994) and Lee (1989), differs quite dramatically in philosophical assumptions, research procedures, generalizability arguments, and the form of the written research report, from the ethnographic case study, as described and illustrated in the two articles in this first Special Issue installment. These are just two research methods from a field that probably numbers at least a dozen. To signal the variety of methods that are commonly called qualitative research, we used the less familiar term "intensive research" (suggested by Weick 1984).

We were concerned that the tendency to call dissimilar methods by a familiar collective term (like qualitative or interpretive research) promotes the tendency of reviewers and readers to apply inappropriately a single set of criteria to all studies covered by the label. In our experience as authors and editors, for example, we have found that some readers inappropriately use positivist criteria to judge interpretivist intensive research, and others inappropriately use interpretivist criteria to judge positivist intensive research. While intensive researchers have been, unfortunately, habituated to the application of inappropriate criteria to intensive research by some colleagues who specialize in quantitative methods (a practice that, fortunately, has been lessening recently), we have been shocked and dismayed by a similar lack of "professional courtesy" by intensive research specialists. We hoped to promote acceptance and appreciation for diversity within the community of intensive researchers as well as across the intensive/quantitative divide by clarifying the appropriate criteria for evaluating each of several different intensive methods.

Since we were not up to this task by ourselves, we conceived the Special Issue as a way to encourage other researchers to do it with us. Like many goals in life, this one turned out easier said than done. We are not entirely sure that we would set the same goal or go about it the same way if we had it to do over again. So many authors misunderstood our intentions about the "exemplary" nature of the studies we wished to publish and about "the criteria by which such research can be judged" that we were compelled to issue the following amendment to the Call for Papers:

Because the Special Issue is soliciting submissions of exemplars, authors of a submission (1) must identify clearly in their manuscript's methods section the criteria by which to judge research that employs their particular intensive method and (2) must show explicitly how the research in their manuscript meets those criteria.

Even so, we had numerous follow-up telephone discussions with authors to explain exactly what we were trying to do. Eventually most submitters got on board, but it was definitely an uphill battle.

That's why it is such a pleasure to publish the two articles in this installment. First, Walsham and Sahay have playfully used the comments of the reviewers on their original submission and the changes they made in response to the reviewers' comments as material to illustrate the appropriate criteria for judging their research. Second, Klein and Myers have dealt with the criteria issue so faithfully to our intentions that it could almost have been written to our specifications. (Their article was originally submitted to *MISQ* through the regular review process, because it is primarily a methodological essay and does not present original empirical research as requested in the Call. It does, however, apply the criteria to three empirical studies. And, fortuitously, it pairs perfectly with Walsham and Sahay's interpretive field study.)

### ***Emphasis on Knowledge, Not Information***

Our Call for Papers also expressed a second goal: "While we will consider exemplary intensive manuscripts in any substantive area of information systems, we are particularly interested in manuscripts that focus on the role of information technology in how people and organizations use and manage not just data and information, but rather, all forms of knowledge, such as intellectual capital, organizational memory and learning, group knowledge, and documentbases. Such studies might have a substantive focus on information technologies that include, but are not limited to, the following: the Internet and the World Wide Web, groupware products like Lotus NOTES, digital libraries, electronic news and shopping services, systems that support scholarly collaboration, personal digital assistants and cellular communication, hypertext encyclopedias, and other forms of physical and electronic documents."

Here we were simply too ambitious. We received several manuscripts that addressed the substantive theme for the issue innovatively and well, but only one (Schultze forthcoming) was able to convince the reviewers about exemplariness of method. Also, regarding Walsham and Sahay's study of geographic information systems for regional administration in India, we find it quite gratifying that their study highlights so clearly the

knowledge gaps between technology designers and users.

### ***Increasing the Acceptance of Intensive Research***

An unstated objective for the Special Issue was to publish excellent intensive research simply to increase the legitimacy of such research. From its inception until quite recently, the academic information systems field has often been hostile to non-quantitative and non-positivist research. With our Call for Papers in 1996, we saw the Special Issue as a safe harbor where intensive researchers would be welcomed by editors and reviewers with similar values.

We found, however, that this goal had already been accomplished well before publication of this first installment. Indeed, the acceptance of intensive research has been so total that serious challenges to the legitimacy of such research no longer arise. Today, intensive researchers have substantial representation on the editorial boards of major information systems journals—and *MIS Quarterly* has even selected one (Allen) as its new editor-in-chief. At the same time, best paper awards in information systems conferences and journals are being given for intensive research papers. Just over a year after we issued our call for papers, Working Group 8.2 of the International Federation for Information Processing held a conference celebrating "Information Systems and Qualitative Research." The keynote speaker (Lynne) asserted: "Qualitative research has won at least one major championship—academic acceptance, both within the IS field and within the larger domain of academic management studies" (Markus 1997, p. 12). Indeed, that keynote address could have largely served as our senior editors' introduction to the Special Issue if the goal of acceptance had not already been achieved.

Apparently the same circumstances that motivated us to propose the Special Issue also moved others to legitimate intensive research. But any disappointment we might feel about not being the first to achieve this goal is more than outweighed by our satisfaction in knowing that our field now sufficiently accepts methodological diversity to move beyond method into the unique subject matter of the information systems field.

### ***Beyond Method***

Inspiring our search for exemplars of intensive research has been Thomas Kuhn, whose seminal work in the history of science reveals both the intellectual and political character of science. It is not enough simply to present methodological rules in a textbook-like fashion.

Students of physics regularly report that they have read through a chapter of their text, understood it perfectly, but nonetheless had difficulty solving the problems at the end of the chapter. Almost invariably their difficulty is in setting up the appropriate equations, in relating the words and examples given in the text to the particular problems they are asked to solve. Ordinarily, also, those difficulties dissolve in the same way. The student discovers a way to see his problem as like a problem he has already encountered. Once that likeness or analogy has been seen, only manipulative difficulties remain.

The same pattern shows clearly in the history of science. Scientists model one problem solution on another . . . (Kuhn 1977, p. 305).

Methodologies in themselves, like algebraic symbols, are formalisms, devoid of empirical content. Shared examples of the empirical application of methods are essential for establishing how the formalisms (whether intensive or extensive, positivist or interpretive) apply. Furthermore, agreement in the community on what constitutes exemplary research can only advance our shared interest in information, technology, and information systems as important dimensions in our area of inquiry. We hope that the exemplars in this and future installments of the Special Issue will not only promote excellence in intensive research, but help move all information systems researchers beyond method toward the fascinating substance of our field.

### ***Acknowledgements***

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compassionate and constructive attitudes of the associate editors and the reviewers generally surpassed what we have seen in our previous experiences as editors. Naturally, as the senior editors, we accept the responsibility for those cases where our decisions contradicted the overall sense of the associate editor and the reviewers.

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