Editor's Comments

MISQ Central: Creating a New Intellectual Infrastructure

This issue leads off with an "Issues and Opinion" article by Richard Watson that challenges our basic assumptions about scholarship. Watson entreats us to fashion the tools of our profession into a new electronic infrastructure for the creation and dissemination of scholarship. He argues that most of our current processes for knowledge creation and, particularly, knowledge dissemination are firmly entrenched in a world of paper documents and physical distribution systems. While information technology is fundamentally transforming industry after industry, the academic field of information systems is, to a large extent, buried under filing cabinets, shelves of books, piles of journals, and regional phone directories. In this essay, I explain why the *MIS Quarterly* will accept Watson's challenge and describe how we intend to do so.

Publishing Versus Scholarship

Publishing, be it on paper or in electronic form, is not the *raison d'etre* of a scholar. Rather, a scholar's foremost objective is the creation of new knowledge. Publishing is a byproduct. Publishing is the means traditionally used to document new knowledge at a point in time. A scholar's second objective is dissemination of knowledge. Publications, long a major component of the knowledge dissemination process, will become increasingly less important as people learn from doing rather than reading and as information becomes more and more dynamic. A documentation writer in a corporate research lab explained: "You can spend 20 pages describing your 3-dimensional modeling application to someone or you can click on the application and let the model demonstrate and teach." By contrast, a paper (or electronic) publication takes time to create, likely contains errors, and is quickly out of date. In essence, producing byproduct publications can hinder rather than facilitate the scholarly process. New electronic infrastructure will provide new means to demonstrate that new knowledge has been created. But we must first learn how.

The Roles of a Journal

If the pure objective of scholarship is knowledge creation and dissemination, then what role do archival journals play? Such roles must be carefully accounted for if we are to devise electronic alternatives.

Journals are first of all repositories of past scholarship. The volume and issue numbers affixed to scholarly journals, used in citations by subsequent works, permit the formation of a network linking knowledge created today with knowledge created yesterday. Currently, the maintenance of journal archives becomes the distributed responsibility of other parties—primarily public and private libraries and index services such as *The Social Sciences Citation Index*. Electronic publishers must either take on that responsibility for themselves or await progress by professional archivists. Will there be one such archive for each journal, one in each country, one in each community, or will scientists download to their own machines the archives they rely on most? There will also be interesting debates around the kinds of errors that can be corrected, new versions released, etc. Time will take on more importance, while the publication of a periodic journal issue will become less so; individual contributions can be released immediately after they are approved, rather than accumulated into an issue on a monthly or quarterly basis with other unrelated works. Contributions to special "issues" could be special "research lines" released over a string of months or even years.

Journal articles and journal citations are key elements of the faculty reward system in many disciplines. Articles are distributed to external evaluators of promotion and tenure packets, and they are counted, weighted, and read by the internal tenure evaluators. Electronic alternatives must be acceptable to, and accessible by, both internal and external evaluators. This won't be solved by just printing the electronic versions. Electronic knowledge creation and dissemination is more than electronic publishing. If you can print it out sequentially it may no longer even pass muster as quality scholarship. Citations to one's work are commonly used surrogate measures of quality. Citations require, however, that we maintain some scheme of formal dated archiving or that online linkages between archival journals be somehow formally accounted for (note that if both the cited and citing article are in the same electronic network, you can link directly from one to the other and, therefore, might not need a bibliographic reference). If an electronic intellectual infrastructure is to be put in place the senior people in our field must under-stand these issues and be prepared to defend electronic measures of productivity to colleagues in other disciplines. Our opinion shapers have a responsibility to make use of the new infrastructure and become evanglelistic within their own institutions. We cannot afford to have powerful but "unconnected" members of our community anchoring us to yesterday's infrastructure (thus, the *MIS Quarterly* will require all board members to be regular users of the Internet as of January 1, 1995).

Journals house reputations as well as scholarship. This includes the reputation of the journal as well as the reputations of past and present board members, authors, reviewers, and subscribers. Some of these individuals will hold positions of power or influence in their discipline. Some will strongly favor the status quo and will resist change that might threaten the reputation of the journal and, indirectly, their own. As a journal grows older and more prestigious, it risks being shaped by its past rather than by current research needs and opportunities. Authors tend to submit works similar to those the journal published in the past; editors tend to be chosen because they work in the kinds of research areas or use the methodologies the journal has traditionally published. Conservative decisions tend to be made by all involved to protect the reputation of the journal and its many stakeholders. Promotion and tenure committees consider a scholarly journal with a distinguished reputation to be "worth" several times more than one without such a reputation, so aspiring non-tenured faculty tend to model their work on previous studies published in those highly regarded journals. This tendency, coupled with time delays in getting contributions in print and the conservative leanings of the reviewers and editors, is an additional impedi-ment to scholarly innovation.

Overcoming Inertia

If established journals find it difficult to embrace new research areas or methodologies there is little reason to expect them to rush toward electronic distribution. Experimentation requires lots of energy, an investment that in the short run at least, only puts the journal's and experimentor's reputation at risk. Experimentors also confront unknowns around subscription and advertising revenue as well as archiving and copyright issues. On the other hand, if new electronic journals spring up, as surely they will, it will take years for them to distinguish themselves and to establish reputations for scholarship. Without those reputations of quality to back them up, proponents of such journals will carry little weight in selling electronic publishing in promotion and tenure committee debates.

Building a new intellectual infrastructure in a timely manner requires that the key institutions in our field join together to move us rapidly up the learning curve. The *MIS Quarterly* is committed to being in the vanguard in this initiative. But we are equally committed to maintaining and continuing to enhance our reputation for quality scholarship while simultaneously looking after our fiduciary responsibility. We therefore will pursue a strategy that is both cautious and aggressive. Thus, we require more than one electronic initiative, representing varying degrees of innovation and risk. At the center of these initiatives is *MISQ Central,* our new "homepage" on the Internet's World Wide Web.

MISQ Central

Richard Watson joined the *MIS Quarterly* editorial board nine months ago with the agreement that he would help us ascend the learning curve of electronic scholarship. Since that time we have established an electronic forum for our editorial board, initiated an experiment with electronic reviewing, and produced a prototype of *MISQ Central*. *MISQ Central,* like railroad stations such as Bombay or Brisbane Central, Grand Central in New York, Milano's Centrale, or Oslo's Sentral, is intended as a central meeting place for researchers, faculty, and students in information systems. On one hand, *MISQ Central* is little more than a single-page directory listing the various electronic services and products that the *MIS Quarterly* intends to distribute over the World Wide Web. On the other hand, *MISQ Central* will be a set of standards for producing those products, a repository of tools to assist in their production, and a steering committee to keep each production focused and distinct while managing interfaces to other online enterprises.

For those with access to the World Wide Web and a web browser such as Mosaic, you can visit *MISQ Central* by accessing the following Uniform Resource Locator (URL):

http://www.cox.smu.edu//mis/misq/central.html

Because this is an experimental activity, the location of *MISQ Central* may change as we gain experience and volumes of users.

From *MISQ Central,* you can access *MISQ Archivist, MISQ Discovery,* and *MISQ Roadmap,* as well as several other productions. The most significant three are described below. We encourage you to visit *MISQ Central* to learn what else will become available.

MISQ Archivist

This is our cautious entry into electronic publishing. Works "published" in the *MISQ Archivist* (with the exception of editor's comments) will be formally reviewed in the same manner as articles published in the *MIS Quarterly.* Articles will appear in full text in *MISQ Archives* and will be abstracted and indexed in the *MIS Quarterly.* From the perspective of the *MIS Quarterly,* they will be equivalent in quality, stature, and reviewing process to the more traditional articles published in that journal. Typically, they will be works that do not lend themselves readily to traditional printed format. For instance, they might be a readily generalizable application that solves a significant problem in software distribution. They should take advantage of both the interactive nature of the World Wide Web and its ability to support multi-media presentations.

We will also publish each year, in full text, two or three more traditional articles that have also been published in the *MIS Quarterly.* These will be award winning papers such as the best paper of the year and the best paper from the Society for Information Management International's best paper contest. Our intention is to bring these papers, and the *MIS Quarterly,* to the attention of a broader audience. The *MISQ Archivist* will also be used to archive data, measures, etc. that are referred to in articles published in the *MIS Quarterly.* The *MISQ Archivist* will eventually include tables of contents as well as abstracts and executive briefs for past issues, which we intend to support by full-text search capabilities. Also published here will be editorial statements and refereed "Issues and Opinions" articles that relate to electronic knowledge creation and dissemination.

There will not be a separate editorial board for *MISQ Archivist.* Members of the existing board of the *MIS Quarterly* and a senior editor will assume primary oversight responsibilities for the *MISQ Archivist* in addition to his or her responsibilities for The *Quarterly.* Articles published in the *MISQ Archivist* will be reviewed by a review panel under the direction of an *MIS Quarterly* associate editor and senior editor. This is to be a very conservative electronic outlet that will initially publish very few works. Those that are published will be of a quality commensurate with the *MIS Quarterly.*

MISQ Discovery

MISQ Discovery will be an adventursome and experimental electronic production. The intent is to foster the creation and electronic distribution of innovative work pertaining to the use of information technology for the creation and dissemination of scholarship. Among *MISQ Discovery's* objectives are to help us learn about electronic publishing, explore alternatives to publishing for knowledge dissemination, provide intellectual support for a global community of information systems scholars, challenge the assumptions of paper-based scholarship, and establish a learning organization that can be a model for our organizations and those of students and colleagues from other disciplines.

We are instituting a traditional "peer" reviewing process as well as drawing particularly good work to the editorial attention of the *MIS Quarterly.* Research contributions will be published in *MISQ Discovery,* but one-time initiatives intended to help us escape the tyranny of "paper publishing" will also be encouraged. Specific illustrations of potential *MISQ Discovery* initiatives are available from the *MISQ Discovery* home page.

The initial editorial board for *MISQ Discovery* will be announced this winter. Information systems researchers are encouraged to seek appointment or nominate others. Such individuals should be tenured, have a respectable scholarly publication record, and have specific ideas about how to harness the net to knowledge creation and dissemination. We are looking for creative thinkers and "take charge" researchers who can attract others to their visions and stimulate visionary thinking.

Editorial Board appointments to *MISQ Discovery* will be for 18 months and can be renewed several times based on recent contributions to the endeavor and/or projects underway.

MISQ Roadmap

MISQ Roadmap is intended to be a repository for people who have a need to interact with the *MIS Quarterly's* various management processes. It will include information for prospective authors, reviewers, subscribers, sponsors, and advertisers. It also will eventually include information on our various processes that may be of use for student projects as well as a starter kit for people interested in developing applications for the World Wide Web. We intend to make it possible to electronically submit an article from *MISQ Roadmap* or to track the progress of an existing one.

ISWorld Net

The *MIS Quarterly* has been working closely with several other prominent institutions in information systems to produce a single common World Wide Web gateway to information systems resources. We will be among the founders of this enterprise. A prototype homepage, listing those organizations who have tentatively agreed to be among the founders is available at URL:

http://www.cox.smu.edu/mis/iswnet/home.html

InfoSys Junction

If a real electronic home base is to be established for our scholarly community, there must be reasons for people to visit there often. Looking at abstracts and tables of contents, even from several journals, probably cannot provide that critical mass. Therefore, we are in discussions with Dennis Viehland, the editor of *INFOSYS,* and others to oversee the establishment of a general information center accessible either from *MISQ Central* or *ISWorld Net.* Here will be conference programs, calls for papers, lists of listservs, journals, "hot lists," research centers, and the like. In other words, anytime you needed information such as this, you would access either *MISQ Central* or *ISWorld Net* and, within four or five clicks, there's the information you require. Such data would actually be maintained by, for instance, conference committees or research center directors with a link to it from *InfoSys Junction.* If the data becomes unreliable or outdated the links would be removed. Dennis can be reached at D.Viehland@massey.ac.nz if you would like to contribute.

New Organizational Structure

As evidence of the *Quarterly's* commitment, I will step down on December 31st as the senior editor of the *MIS Quarterly* and assume a new post with primary responsibility for our new electronic ventures. Up to four *MIS Quarterly* associate editors, including Sirkka Jarvenpaa and Richard Watson, will also be actively involved in these activities. We will be restructuring the *MIS Quarterly* Editorial Board, to take effect within the next two months. This will involve the creation of a Senior Editorial Board consisting of probably four individuals and the retitling of my current position to editor-in-chief. The Senior Editorial Board is intended to provide additional leadership as we navigate the electronic publishing learning curve. It will also reduce the very high workload of our senior editor for theory and research, Gerry DeSanctis, while providing additional visibility and challenge for the members of our editorial board who have made an outstanding contribution to the journal. The change in title from senior editor to editor-in-chief reflects no change in responsibility, but is instead intended to clarify the *MIS Quarterly's* organizational structure for those less familiar with the journal. The incoming editor-in-chief will be announced in the December issue (and probably sooner on the editorial page of *MISQ Archivist.)*

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I am pleased to announce the appointment of two new members to our Editorial Board. These include Dov Te'eni of Case Western Reserve University and Phillip Ein-Dor of Tel Aviv University.

Prospective authors are reminded of a change in our policy regarding reviewers. You may now provide the names (along with contact information) for reviewers that you feel could give a fair and unbiased assessment of your paper. There must be no conflict of interest for such nominees. You may also suggest associate editors that you feel would be good choices for the paper. The *MIS Quarterly* retains, however, full responsibility for selection of the review panel.

Our policy regarding the blind reviewing process has also been modified. Although neither the author nor the reviewers will know the identity of each other, our associate editors will be provided with the identities of authors. We are making this change to encourage greater input from the associate editors in the selection of reviewers.

Authors are also reminded to include keywords, abstracts, classification codes, and electronic mail addresses with their submissions. Manuscript submission guidelines are available in the June, 1994 issue [page 211-214] and are also available through *MISQ RoadMap* on the World Wide Web. Following these guidelines carefully will avoid unnecessary delays in processing manuscripts.

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Our apologies to Julie Newman, co-author of "A Multimedia Solution to Productivity Gridlock: A Re-Engineered Jewelry Appraisal System at Zale Corporation," which appeared in the March 1994 issue. Her correct address is: IBM, 8000 Bent Branch Drive, Irving, TX 75063, 214-402-5092.

—Blake Ives