Editor's Comments

Cycle-Time Reduction for Disseminating Scholarly Research

Like previous June issues, this one contains our annual listing of information systems doctoral dissertations, prepared by J. Scott Hamilton and Gordon B. Davis. The list attracts to the June issue many doctoral students who seek inspiration for their own research. And, during the summer, when faculty have some time to spare, they too might stumble onto these pages. With that hoped-for audience, June may be a good issue for the editor's comments to again tackle the Byzantine process by which scholarship gets evaluated and disseminated.

This year-old tradition started last June with comments focused on "Total Quality Management of Journal Reviews." There I sought to fan the fire under our collective feet—reviewers, editorial board, and senior editors—so as to further temper our reviewing process. Anticipating that few people read editor's comments, we distributed several hundred copies with requests to review particular papers. Those comments may not have been the inspiration, but the quality of our reviews has improved over the last 12 months. In particular, more reviewers are adding new value to submissions while continuing to fulfill their well-understood role of gate keeper. Our editorial process has been enhanced as reviewers took up the challenge to set "personal expectations a few notches higher."

Today, I raise a related concern—the growing time-delay between a research project's inception and the reporting of that work in a top-tier scholarly journal. Cycle-time reduction has become critical to many business organizations, with many rich success stories to report. But cursory evidence suggests that cycle times related to the production of and reporting on management-related scholarship are growing worse, not better. I went back 30 years in *Management Science* and looked at the 27 articles that appeared in three issues between January and July of 1962.[1] The average article took slightly over one year from the time submitted to the journal until it appeared in print. By 1992, as the table below shows, 23 articles required an average of slightly less than three years to get into print. That represents a cycle-time increase of nearly two years, or about seven tenths of a month for every year since 1962. And, the trend line apparently continues to elevate. I didn't choose *Management Science* because I believe them to be particularly egregious. Rather, I picked them because they are a prestigious, if infrequent, outlet for information systems research and because they conveniently append chronological tracking data with each article. The *Quarterly* doesn't provide such an historical trail. If one was available it would probably show our own cycle time to have significantly deteriorated over the past 17 years. Although

Journal	Issues	Number of Articles	Average Months From Receipt to Publication
Management Science	1/62, 4/62, 7/62	27	13
	11/71, 1/72, 3/72	27	20.5
	8/81, 9/81, 10/81	24	30.5
	8/92, 12/92, 2/93	23	35
Organization Science	5/91, 8/91, 11/92	12	32.8
Information Systems Research	3/91, 9/91, 12/91	8	26.25

[1] Short comments, research notes, or other submissions that appeared to have gone through a different process than the usual research submission were not included in the analysis.

we have improved recently, it is still not unusual for us to publish an article for which the original research was done far longer ago than I am comfortable with.

Quality scholarship should resist the test of time. One significant difference between scholarly journals and, for instance, the trade press, is the timelessness of the former and the temporal sensitivity of the latter. For example, the work of Bob Bostrom and Steve Heinen on the causes of information systems failures is almost as useful today as it was when originally published in our first volume back in 1977.[2] On the other hand, the value of a list of key issues facing senior information systems executives will erode quickly as those key issues change.

The *Quarterly* comes to you with a squared off and neatly labeled spine. We hope that this collection will sit on your bookshelf for years to come and that you will occasionally find value in a back issue. But, though we strive for timeless contributions, we must also recognize that we work with phenomena and technologies that are themselves rapidly changing. We are putting our heads deeply in the sand if we believe that our research is immune to long publication delays. Furthermore, even for work that does stand up well over the years, few will harvest the benefits until the article gets into print.

The costs associated with the delays in publication cycle times can become very personal. Time ticking away on an assistant professor's tenure clock is a dear and irreplaceable asset. That article review request that has been sitting on your desk for two months could be, and often is, a key element of a tenure or reappointment decision. And, the delays noted in the above table represent only part of the total time requirements. Time is also expended in conducting the research, writing it up, and, in some instances, unsuccessfully attempting to publish the work in another journal. This can easily double the total time outlay—thus perhaps requiring, on average, a total of something approaching five years to create and publish a quality research contribution. Most research-oriented business schools in North America expect tenure candidates to have at least one, if not three or four publications in top-tier, peer-refereed journals. Because tenure decisions are often made after about 5½ years, it becomes apparent why time is so essential to non-tenured faculty. But tenured faculty also compete for annual raises, promotions, endowed positions, etc. They too value editorial responsiveness.

There are a variety of things we might do to reduce the cycle time within our existing paradigm. For instance, prospective authors should seek informal reviews from colleagues and friends long before the paper is submitted—even before the research is carried out. Similarly, the services of professional copy editors can be acquired at little expense. Later, after papers have been returned to authors with requests to revise and resubmit, they often lie untouched for months or even years. Gerry DeSanctis, our Senior Editor for Theory and Research, and I have begun to assign dates that papers must be revised by, thus elevating the relative priority of these revisions against competing demands on authors' time. We have also intensified our prescreen of initial submissions. We are sending less papers out for review while giving authors quick value-adding feedback. Of the last 50 papers submitted about 35 percent were returned to their authors without a complete review. Although some were rejected, other authors were given suggestions intended to improve the paper's potential for the first official round of reviewing. Some authors may find this outcome to be disappointing, but only a few weeks of valuable time will have been expended.

The single area where we can generate the most cycle time improvement is in the review process itself. Information systems competes with other disciplines, both within the business school and university. We, therefore, must become impassioned about turning referee and associate editor reports around quickly. Reviews are more than service opportunities, they are the lubricant that determines whether our discipline functions efficiently. At the *Quarterly,* we will continue to tighten our own review tracking system while establishing high expectations for our editorial board and ourselves for further reductions in cycle time.

To inspire us, lets set a stretch objective of getting 90 percent of accepted articles in print within 20 months of submission by December of 1994. To make our goal, authors will have to share responsibility

[2] Robert P. Bostrom and J. Stephen Heinen, "MIS Problems and Failures: A Socio-Technical Perspective - Part 1: The Causes," *Quarterly*, (1:3), September 1977, pp. 17-32.

for compressing their own process cycle time. If you think it's time you heard something, give me a call or send me a message (B3LR1001@VM.CIS.SMU.EDU).

Further reductions may require a deeper look at the underlying assumptions. For instance, currently authors do not see any reviews until the entire review packet is complete. With low-cost electronic transmissions, authors could be provided with access to individual reviews as they become available. They could begin to think about changes that may be required or how to best position the article for another journal. Similarly, an article ready for publication in March is currently not available until it appears in the June issue. Might we publish a preliminary electronic version as articles become available? Major changes are also possible in the way we assign and motivate referees. Some journals, particularly in finance and economics, pay reviewers, using modest submission fees collected from prospective authors. In some instances, journals only rely on a single referee, whose name may appear in an acknowledgment that accompanies the published paper.

We are committed to getting manuscripts turned around more quickly and to seeing high-quality work in print sooner. We welcome your advice as to how we might re-engineer this process. However, the *Quarterly* is one of several quality outlets that seek to publish the best work in our field. Because there is some interdependence among these outlets, we call on the editors of other information systems journals to join our campaign. And we suggest to prospective authors that you can help to motivate our collective efforts by favoring with your submissions those journals that can simultaneously serve you with distinction, dispatch, diligence, and breadth of distribution.

* * * * * * * * *

In this issue we are publishing an updated version of the Barki, Rivard, and Talbot "Keyword Classification Scheme for IS Research Literature." The original was published in the *Quarterly* in 1988. With this issue, we are also beginning to use these classification codes along with keywords to describe each published article. We have been using the previous version for some time to help us assign associate editors to manuscripts. With the recent introduction of our new computer system (championed by former senior editor Jim Emery) in our offices in Minnesota, we will also begin to use a subset of this scheme to help assign reviewers.

In an emerging era of full text search, it might seem incongruous for us to continue to rely on a narrow classification code. However, a consistent vocabulary, such as provided in this scheme, is important in helping to move science forward. The authors tell us that a common vocabulary also helps define our field while providing a benchmark for studying the evolution of information systems research.

The scheme contains approximately 1,300 words of which 175 have been added since 1988. Interesting additions over that half decade include: "total quality management," "globalization," "neural networks," "client-server," "function point analysis," "outsourcing of IS," "IS downsizing," "object-oriented programming," "electronic markets," "electronic meetings," "image systems," and "graphical user interface." The salience of many of these new terms for today's manager of information technology is a convincing illustration of the need for our research to be disseminated quickly.

—Blake Ives