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ISSUES AND OPINIONS

RIGOR VS. RELEVANCE REVISITED: RESPONSE TO BENBASAT AND ZMUD

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Academic IS Research: Rigor vs. Relevance Revisited¹

We strongly agree with Professors Benbasat and Zmud that information systems research must become more relevant. We see the goal of research relevance as critical to the long-term survival and success of our field.

However, we believe that Benbasat and Zmud have *not gone far enough* in their analysis of IS research irrelevance and their recommendations for change. They are confident that IS research can be made more relevant without fundamen-

tally challenging core academic values around research rigor, publication outlets and audiences, and the perils of consulting. By contrast, we believe that far deeper changes in the research enterprise are required.

Specifically, we challenge and expand on their arguments in several different respects, as summarized in Table 1.

Whom Should We Emulate?

IS research is no less relevant than that of other business disciplines. But this is no cause for pride. Since the Ford and Carnegie Foundation reports criticized business schools for lack of academic rigor, business faculty have become increasingly distant from the real world. We would do better to emulate colleagues in medicine and law than those in other business school fields. For example, most medical school faculty also have clinical practices. At the University of Texas law school, one professor defended an Oklahoma City bombing suspect; another defended Texaco in a \$10 billion lawsuit. In medicine and law, practitioners actually read academic journals.

IS academics experience the same institutional pressures toward irrelevance as other business faculty, e.g., promotion and tenure evaluations based on publications in referred academic journals (but not in practitioner journals) and evaluative letters from other academics (but not from practitioners). Despite these common influences, the IS field differs from other management fields in important ways, most notably, as Benbasat and Zmud point out, in the dynamism of our subject matter.

¹This article expands on ideas presented by Tom at the 1995 AIS Conference in Pittsburgh, PA and by Lynne and Tom at the SIM Academic Institutional Member Workshop in Cleveland, OH, December, 1996.

Table 1. Arguments Compared: Benbasat/Zmud and Davenport/Markus

Benbasat and Zmud	Davenport and Markus
The IS field became irrelevant by emulating the rigors of other academic management fields. But our emulation of those fields has not gone far enough. They have a cumulative research tradition, which we lack: this hinders our ability to lead and advise practitioners. We should, therefore, strive for greater consensus about the core theoretical concepts and enduring practical issues in our field.	Other academic management disciplines are the wrong role model for IS. We'd be better off emulating medicine and law. A cumulative research tradition hinders relevance in an era of rapid business and technology change. To achieve distinction as a field, we must not emulate irrelevant management fields, but lead them in relevance.
Practitioners value empirical research with concrete recommendations, syntheses of prior research, and critical essays about practice. The best way for the IS field to pursue relevance is to conduct applied theoretical research. Such research is publishable in our existing academic journals with only minor changes to journal mission statements and reviewer guidelines.	Evaluation research and policy research are promising alternatives to applied theory research, but they are not in academic IS journals. Publication outlets like <i>HBR</i> and <i>SMR</i> are valued by practitioners and publish research that practitioners value, but IS academics devalue these outlets. The IS field should support practitioners' outlets in addition to making academic journals more practitioner accessible.
Because rigor is what distinguishes academic research from consulting, consultants make poor role models for rigorous and relevant IS research. Consulting work is at best a distraction, at worst a bad influence on IS academics.	While much knowledge published by consultants lacks rigor, there is much worth emulating in the consulting world today. Consultants are typically faster at identifying practitioners' needs for research, and they increasingly see the rapid production of good (if not rigorous) research as a key success factor. Instead of disparaging consultants, we should study their methods and improve on them.
The primary audience for practical IS research is current senior practitioners.	Our undergraduate and masters students are important research consumers. We should aim to produce practical research that is consumable by current students, thereby increasing the audience of reflective practitioners.

The differences of our field require us to take a different approach to research. We will never distinguish ourselves by trying to be as good as economists at economics, as good as statisticians and operations researchers at stats and modeling, as good at behavioral science as our counterparts in OB and HR. We might, however, distinguish ourselves by conducting more *relevant and timely research* than other management fields.

At the very least, greater relevance will secure future resources in the form of students, jobs for students, and research funding from business.

Irrelevance, on the contrary, threatens our access to these essential goods.

New Models of Research and Acceptable Publication Outlets

Like Benbasat and Zmud, we strongly value excellence in scholarship. However, we believe that it is both possible and necessary for IS academics to do excellent *practical* research that differs from excellent *traditional academic* research in approach, evaluation criteria, and publication outlets.

The most familiar model of academically acceptable relevant research is the "applied theory" approach, championed by Bob Zmud,² in which researchers apply appropriate academic theories to practical problems. Applied theory research has many of the same evaluation criteria as more basic theory testing and is easily publishable in IS academic journals.

Two different—but equally valid—models of practical research are evaluation research and policy research. Evaluation research applies practical as well as theoretical criteria to the assessment of an intervention (e.g., the implementation of an information system). Intended for academics and practitioners, it has a strong tradition in education, social work, and public health. Policy research, most commonly found in schools of political science and government,³ focuses on resolving an identified policy problem. Not primarily theory-driven, policy research develops new concepts, solves practical problems, or systematizes, generalizes, or clarifies concepts for academics and decision makers.

Although these two approaches are widely accepted in other academic fields, they do not fit current definitions of acceptable IS research and are not easily publishable in IS academic journals. Neither are the other types of research that Benbasat and Zmud tell us practitioners value—research syntheses and critical essays.

To us, the solution is clear: not only must IS academics focus on publishing readable applied theory research in academic journals, we must also support outlets that practitioners read and that publish the research they value.

Among such outlets are the hybrid business-academic journals—*Sloan Management Review*, *California Management Review*, and (to a lesser degree) *Harvard Business Review*, are hybrid academic and business journals. *Sloan* is an

especially important case for the IS field. This journal has over four times the circulation of *MISQ*, it is peer-reviewed (like *CMR*, but unlike *HBR*), and (unlike both *HBR* and *CMR*) it publishes IT-related articles in almost every issue.

Our recommendation is that IS academics should support these journals by submitting research to them and by counting them heavily in promotion and tenure evaluations. Generally, however, we have not done so. IS academics often disparage these outlets and discount their articles in faculty personnel cases. Such behavior completely undermines the goal of IS research relevance.

Consultants vs. Academics

IS academics like to think that we do (and should) *lead* practice rather than follow it. At the same time, IS academics are quick to differentiate what we do to lead practice from what consultants do—what we do is, of course, better.

These self-serving myths get in the way of increased relevance. If academics ever led the race to invent relevant new business IT concepts and approaches, we now lag. From reengineering to mass customization to virtual organizations and offices, the ideas that shape how managers think about IT have come from consultants. Increasingly, consultants are recognizing the importance of sound practical research to inform their work: They are supporting their associates with technologies for knowledge creation and sharing. They are building research centers to sponsor and conduct practical research. In some cases, they even produce quality research publications, like *The McKinsey Quarterly*, *Outlook* (from Andersen Consulting) and *Business and Strategy* (from Booz Allen & Hamilton).

Not all research conducted and disseminated by consultants is of high quality. But IS academics can learn much from the relevance, the readability, and the emphasis on implementing results of the best consultant research. Instead of disparaging consultants, we should take the best of what they do and improve on it. Instead of viewing consultation as a distraction from legitimate research, we should respect it as an alternative way to acquire and share knowledge.

²Zmud, R. W. "Editor's Comments," *MIS Quarterly*, June and September 1996.

³See, for example, Lindblom, C.E., and D.K. Cohen, *Usable Knowledge: Social Science and Social Problem Solving*, Yale University Press, New Haven, CT, 1979; also Majchrzak, A., *Methods for Policy Research*, Sage, Thousand Oaks, CA, 1984.

Expanding the Audience for Practical Research

Benbasat and Zmud assume that the key target of practical research is the current senior practitioner. We argue that an equally important audience is today's student—tomorrow's practitioner. In many cases, IS academics produce research that our students cannot use and assign readings produced by our non-academic competitors. (When was the last time that *you* successfully assigned articles from *Information Systems Research*, *Management Science*, or even *Journal of Management Information* in MBA and undergraduate courses?) While most texts and cases are authored by academics, many IS course readings today are articles from *Harvard Business Review* (HBR), the *Sloan Management Review* (SMR), *Computerworld*, and *CIO Magazine*. As noted above, these articles are often authored by consultants, and the outlets are often disparaged by academics in promotion and tenure reviews.

Throughout the business world today, companies take pride in being "best practice" users of the products they make and sell. But we IS academics often don't "eat our dogfood" where our student reading assignments are concerned.⁴ This practice reflects badly on our collective research enterprise and puts us at risk in the emerging environment of corporate universities and distance learning.

Clearly, the solution is not to force our students to like the research we currently produce, but rather to take their needs into account in producing our research. Because our current students are future practitioners, research that meets their needs will eventually build our influence in the practitioner community. Put differently, we should use our research enterprise and our presence in the classroom as an opportunity to grow the audience of "reflective practitioners" consuming our research.

We Have Met the Enemy . . .

What will it really take to make IS research more relevant? For good or ill, we have only ourselves to change. For example, journal reviewing and promotion and tenure reviews are important mechanisms for maintaining irrelevance. Yet we are the ones who write reviews and evaluation reports. Where relevance is concerned, we are our own worst enemies. It is we who must change the criteria we use to assess research for publication and career progress.

We are not saying that everyone in the IS field must immediately shift all efforts away from traditional academic values toward practical relevance. On the other hand, we are saying that our field desperately needs more relevant research than it has today. The regard in which we are held by the world—and our long-term access to essential resources—will ultimately depend not on the regard other academics give our research, but on our demonstrated service to external customers.

For the sake of argument, we might propose a target portfolio for the field's cumulative research output with high science, applied theory, and practical research in equal proportions. With such a mix for the *field as a whole*, one would expect to see significant variations among *individuals*. We also like the concept of "the impact frontier," in which researchers have the potential to contribute to both business and academic communities (see Figure 1). An article published in a rigor-oriented journal (e.g., *Management Science*) may have the same impact quotient (albeit on different dimensions) than a research-based contribution in a journal of high relevance (e.g., *Harvard Business Review*). For different types of research, we choose how to position a publication for the kind of impact we hope to have.

While not all IS academics need to *do* relevant research, we all need to *value* it. That is, we must read it, teach it, apply appropriate evaluation criteria when asked to review it, respect the journals that publish it, and honor those of us who do excellent relevant research. In short, we must eat our own dogfood.

⁴Microsoft calls using its products to build its products "eating our own dogfood."

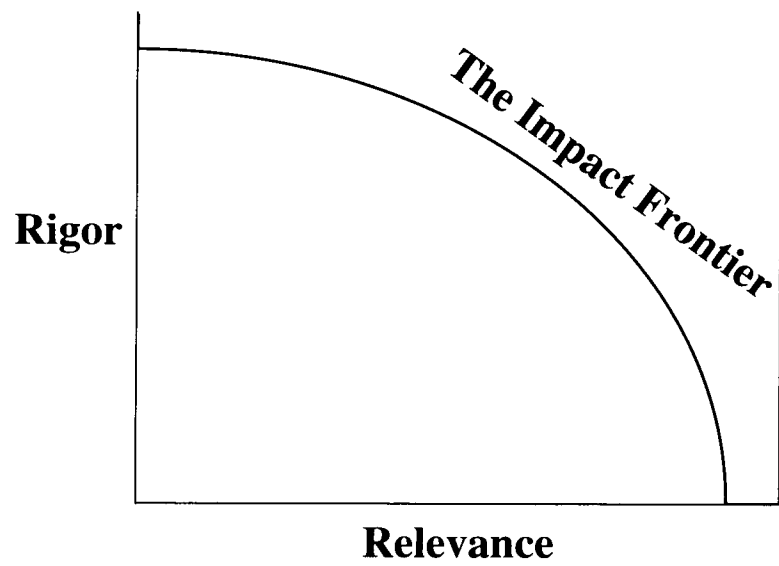


Figure 1. Rewarding Rigor and Relevance

