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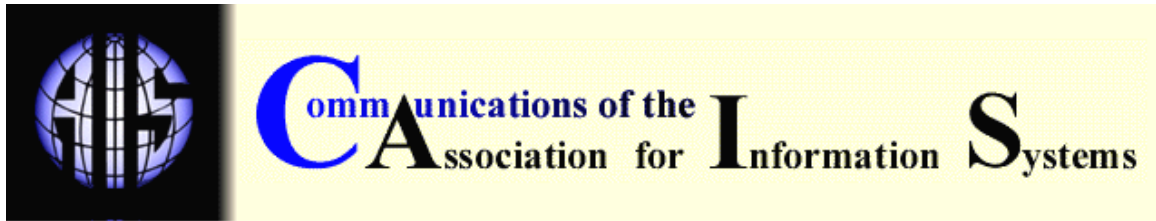
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## EXPANDING THE NOTION OF RELEVANCE IN IS RESEARCH: A PROPOSAL AND SOME RECOMMENDATIONS

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### ABSTRACT

Based on an analysis of *a priori* discussion on the notion of relevance, this paper proposes a holistic view of relevance in IS research. This expanded notion of relevance incorporates a broader definition of *audience/stakeholder*, and includes additional dimensions such as *scope/value of relevant research*, *time frame*, and *"situatedness"* of relevance. In view of this definition, it is argued that "practical relevance" is not the sole goal of academic research. Hence, the authors recommend, for example, that knowledge claims in IS need to be better communicated and targeted for the future development and recognition of the IS discipline.

### I. INTRODUCTION

Concerns about the relevance of IS research preoccupied the IS community ever since its inception. The task of keeping up with the rapid pace of technological advances became more onerous and made IS research published in our premier journals seem irrelevant at times. Both within academia itself and from industry, critical voices question the actual relevance of IS research today. Several leading academics accuse IS research of being reactive and impractical, resulting in limited relevance of research outcomes and near ignorance by practitioners in the field [Benbasat and Zmud, 1999; Ciborra, 1998; Galliers, 1997]. Practitioners point to the "ivory tower" mentality of IS academics, resulting in research activities that are neither "comprehensible nor practical" [Davenport, 1997]. These arguments are also part of a larger "identity crisis" in the IS field, related to its current standing as a separate academic discipline [Khazanchi and Munkvold, 2000; Mingers and Stowell, 1997].

As a consequence, the issue of relevance is often brought up for debate at various forums within our field. To obtain some input from the IS community on the perceived contributions of IS research to 'practice', one of us (Khazanchi) posted a request to ISWorld asking the participants to state the top five (by importance) IS research findings that had a lasting impact on IS/T practice and asked for the key reasons for their evaluation. Although the request only generated a handful of responses, the nature of one of these responses managed to stir up a lively debate including more than fifty postings on ISWorld, thus illustrating the importance credited to the topic of relevance by the IS community [Cockcroft, 2001a and 2001b].

In this paper, we argue that much of the present debate on relevance could be resolved by using a more holistic conception of relevance. This expanded notion of relevance accommodates the variegated nature of the IS field as illustrated by relevance claims posed by different stakeholder groups and perspectives.

## II. EXPANDING THE NOTION OF RELEVANCE

*Who should be the target audience for IS research?* This question is fundamental to addressing the notion of relevance of IS research. Benbasat and Zmud [1999] define relevant research as "one that is potentially useful for, as well as accessible by, its intended audience" (p. 12). Their notion of audience is further qualified to include IS professionals and managers "with an interest in IT" as the consumers of IS research that is relevant ("relevance to practice").

Although several voices in the ISWorld debate argued for a broader view of the intended audience for IS research, much of the debate still seems to revolve around the question of whether or not IS research fulfils its role as knowledge provider for the "practical world" represented by business/industry practitioners. There are, of course, solid grounds for regarding practitioners as the key recipients of our research. The origin of the IS field itself is closely coupled with the introduction of computers in organizations. Further, the "corporate world" represents a major placement outlet for our students and accounts for a large share of the funding for our institutions and research endeavors. However, as different applications of IS/IT disseminate into the broader society, through the diffusion of household computers, IT-supported education, Internet, e-commerce, e-government, etc., it clearly becomes necessary to broaden the notion of the intended audience for IS research.

Harvey and Myers [1995] list the following as "stakeholders" in IS research:

<input type="checkbox"/> scholars	<input type="checkbox"/> educationists
<input type="checkbox"/> practitioners	<input type="checkbox"/> users
<input type="checkbox"/> politicians	<input type="checkbox"/> economists
<input type="checkbox"/> citizens (present and future)	

As relevance clearly is subjective in nature, being inextricably linked to the value system of the actual stakeholders, it will often be perceived differently among various stakeholder groups. Thus, rather than defining relevance as a dichotomous concept (relevant vs. irrelevant), relevance should be viewed as a continuum (e.g., 'partially relevant') (Greisdorf, 2000). Benbasat and Zmud's (1999) notion of relevance in terms of "content" (i.e., interesting, applicable, current) and "style" (i.e. accessible) can here be subsumed as potential criteria for assessing the "degree of relevance" of a knowledge-claim.

Table 1 expands the list of potential stakeholders of IS research from that of Harvey and Myers (1995) to include the societal, national and global impact of research. For each stakeholder group, Table 1 presents examples of the potential *scope* and *value* of IS research for this group. The third column lists examples of areas of IS research that address the needs of these stakeholder groups.

This table serves to illustrate how the potential value and character of relevance can vary considerably with the nature of the targeted audience/stakeholder group(s), and how it is possible to identify different areas of IS research that are relevant to the different groups. However, it should also be stressed here that the list in Table 1 only illustrates the content of the research and does not account for possible shortcomings in style or accessibility.

Table 1. Relevance of IS Research: Stakeholders and Value of IS Research

Audience/ Stakeholder Group	Examples of Potential Scope and Value of IS Research	Examples of Related IS Research Areas
Practitioners	Improving existing business practices; Lead the way to new practices; Legitimate decisions	Strategic alignment, TAM, BPR
Scholars	Theory development; Communication of knowledge-claims to peers; Satisfy researcher's intellectual curiosity; Impact personal motivation	"Philosophical" research in IS; Relevance of research; Methodological issues in IS
Educators	Utility of knowledge claims; Engender intellectual curiosity; Develop new instructional methods	Research on IT educational aspects such as pedagogy, delivery, and integration of research in teaching
Users	Empowerment; Improvement of quality of work life	Action research, Socio-technical research, "Scandinavian tradition"
Politicians	Legitimate political decisions; Value for public policy making	The Internet, Privacy issues, Encryption and security, e- government, e-democracy
Economists	Utility through improved understanding of IS phenomena	IT evaluation research
Citizens	Encourage general understanding of the IS discipline; Education about the IS field	IS education and pedagogy, IS ethics, Impact of IT on people
Society	Legitimize public policy making (e.g., privacy issue and related laws); Engender rational discourse on societal issues	Critical research, Impact of IT on society, Privacy and ethical issues of IT
Nation	Education regarding IS issues at national level	Y2K research, National information infrastructures, IT in developing countries
Global	Education regarding IS issues at international/global level; Understanding OS phenomena in the International context	Transborder data flow, Intellectual property issues, Global diffusion of the Internet

A discussion of relevance also needs to take into account the *situatedness* of IS research findings, i.e. whether the nature of the implications of the research can be seen to be general or contextually embedded. For example, cultural differences may result in relevance being assessed differently in different industries, or, on a global scale, in different regions of the world (e.g. North American vs. European practices). Closely related is the *time frame* of the research implications, as represented by the question '*relevant when, and for how long?*' Clearly, relevance can be

somewhat transient in nature. What is considered highly relevant in some time frame may after a while be regarded as less relevant or even of no relevance at a later time. With the rapid pace of technological development in the IS field, this time horizon is often short and is even becoming more compressed. This ambiguity is illustrated by the problem with many articles in archival IS journals setting out to present 'novel implications' for the implementation and use of 'emerging technologies', that are largely outdated by the time an initial submission makes it to publication. On the other hand, this problem is more reason to develop fundamental theories and models that have the potential to explain phenomena in the IS field over time.

### III. CONCLUSIONS AND RECOMMENDATIONS

In proposing an expanded view of relevance, we are clearly in favor of a continued broad spectrum of IS research about topics and "level of analysis", addressing both short term "business needs" and long term "foundational aspects". The value of IS research should not be reduced to being measurable only in terms of direct "practical relevance". Such extreme pragmatism in research, though useful, can restrict our ability to develop ideas that may seem impractical at present but become comprehensible or useful over time.

With respect to relevance for practice, the IS academy must also take some blame. There is an apparent "dumbing down" of our IS educational system. From our own experiences and through anecdotal evidence from colleagues we know that

- students are given little opportunity to digest fundamental concepts in IS (some universities do not even offer a basic "principles of IS" course),
- class sizes at the freshman and sophomore levels are too large to achieve any true learning,
- grading of coursework is lax to say the least (grades are given not earned),
- students are rarely exposed to technical and expository material (trade magazine articles are used in lieu of research articles--how can students really appreciate research?), and
- students are not tested in a form that evaluates their knowledge of IS (e.g., problem-based, essay-type exams versus multiple-choice or in-class case studies)<sup>1</sup>.

We clearly need to rethink how we teach our undergraduate and graduate IS students--who as future managers are consumers of our research.

As argued here, the relevance of IS research should be assessed in terms of different stakeholders/audiences in society and other dimensions such as *situatedness* and *time frame*. Of course, there is clearly room (and a need) for "introspective" IS research that is mainly targeted at other academics. After all, this type of research activity is part of the scientific discourse characterizing any academic discipline, and serves an important function of upholding a community of researchers. The same goes for the different forums for presenting research, such as conferences and workshops, even though these forums may also have an inherent component of "research tourism" or "subsidized vacations" (as stated in the ISWorld posting triggering the current debate). Given the current problems of recruiting students to doctoral programs and hiring good IS faculty, such "fringe benefits" are potentially useful tools for an otherwise less than competitive benefits package available to academics.

However, we also believe that several things need to improve within our field. We fully acknowledge the need for producing research results of practical relevance, both to serve the needs of businesses and to "stay in touch with the real world". Thus we concur with those arguing that IS research today has a "problem of mediation". There is clearly some need for "public

relations" for the IS field; we need to learn to make a greater effort as a community to communicate our research findings effectively to all our stakeholders (à la Carl Sagan in Physics/Astrophysics) without resorting to reductionism or diluting the complexity inherent in the process of conducting scientific research and generating valid knowledge-claims.

Notwithstanding the above, we do not agree with those suggesting that the solution here lies in creating more "practitioner outlets" or adapting the presentation style in our existing journals. As pointed to by several in the ISWorld debate, effective dissemination of research findings may already be a lost battle, simply because practitioners do not have time to read journals or magazines. Rather, as suggested elsewhere (e.g., Saunders, 1998), we also believe that closer interaction with practice should be the means for improving this situation--through strategies such as:

- sabbaticals and internships in corporations,
- encouraging faculty to consult,
- revising doctoral program requirements to include business experience, and
- forming partnerships with professional and discipline-based organizations.

Revising our interaction practices would also ensure that we select topics for research that are considered important for practice. Further, closer links with industry would also have the effect of improving the practical relevance of our teaching.

As a complementary strategy for improving the understanding of the needs of practice we also need more "practical research" defined by Markus (1997) as "*research that seeks primarily to describe, qualify or measure, evaluate or interpret practice in publications for academics*" (p. 18). She argues that rigorous research that describes 'what is going on in practice' is both necessary and useful for theoretical research and practitioner research.

Several participants in the debate on relevance also pointed to the need for realigning the tenure and reward system in US academic institutions and elsewhere because the "publish or perish" pressure imposed on new IS faculty acts as a barrier to focusing on more practically oriented research. In general, publications in outlets targeting practitioners are not given as much credit in tenure assessments as those in archival journals. The same goes for journals addressing issues related to IS education, which are also often regarded as being of low relevance within the "IS research community". Similarly, it is very seldom that pedagogical research finds its way into major IS journals. This is rather inconsistent with the large proportion of time actually spent by faculty on teaching, and the importance ascribed to teaching for disseminating research findings. Based on this, one would believe that research aimed at improving IS education would be regarded of premier importance. Finally, the "publish or perish" syndrome also results in a negative focus on quantity instead of quality. Rather than being allowed time for reading and digesting new findings published in the (now, far too many) IS journals, and aggregating knowledge for further diffusion or contributing to its further development, academics today spend too much of their time on "paraphrasing" and "massaging" research data to produce greater number of publications.

In conclusion, we maintain that the very nature and context in which IS phenomena occur prevents research from being conducted totally divorced from practice. In some sense, we are all practitioners of the IS discipline, except we have different motivations and expectations. Furthermore, scientific research in the IS discipline (or for that matter any discipline) cannot advocate the best course of action for IS professionals in various problem contexts, but it surely can provide an opportunity to aggregate and disseminate "best practice" and illuminate the potential consequences of alternative solutions or courses of actions. Finally, we will argue for the need to put on the "hat" of the intended audience or stakeholder group when discussing and/or assessing the relevance of research. In doing so, one will actually discover that most IS research

produced today meets some criteria for relevance, although not necessarily being of "practical (short-term) relevance". To aid further in this evaluation, we would encourage IS researchers to explicitly state the intended audience in their publications and possibly also suggest adequate criteria for assessing the degree of relevance of their research. In achieving this goal, prospective authors may wish to discuss the implications of their research using the expanded notion of relevance proposed and elucidated in this paper.

## END NOTES

1. Although endemic in many American universities, these problems are either absent or much less prevalent in European and Asia-Pacific institutions.

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