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FASHION WAVES VERSUS INFORMING: RESPONSE TO BASKERVILLE AND MYERS

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In their opinion piece "Fashion Waves in Information Systems Research and Practice," Baskerville and Myers suggest that periods of interest in information systems topics—as observed through publication patterns in the academic and practitioner literatures—can be characterized as fashion waves. Analyzing publication keywords related to four IS fashions—office automation, computer-aided software (CASE) tools, business process reengineering (BPR), and electronic commerce—Baskerville and Myers found that (1) during fashion upswings, the IS research literature closely follows the IS practitioner literature, and hence, IS research is responsive to practice, and (2) during fashion downswings, IS research continues to demonstrate interest in fashions long after they have died in practice, making such research out-dated and irrelevant. Based on these findings, Baskerville and Myers make four recommendations: IS research should

(1) participate more directly at the beginning of the fashion-setting process using research methods such as action research, design science, and practice research, (2) demon-strate more agility in dropping research topics that have lost interest among practitioners, (3) provide more publication outlets like *MISQ Executive* that make IS research accessible to practitioners, and (4) create new publication vehicles similar to *Economic Letters* with very short review cycles for delivering practitioners fast, concise, up-to-date commentaries and research results based upon the latest academic thinking.

We very much agree with some of the recommendations put forth by Baskerville and Myers, but we differ in the way they arrived at these recommendations. We therefore feel that contrasting their model with other potential models can be a useful exercise. In this response, we present an informing model that might be used to explain the same phenomenon.[1]

IS as Fashions or Diffused Innovations?

The central concern we have regarding the fashion wave model is Baskerville and Myers's analysis of the referenced technologies as "fashions." Fashions exhibit upswings *and* downswings (i.e., they are transient in nature). Three of the four technologies cited by Baskerville and Myers—office automation, CASE, and e-commerce—evolved from a state of minimal impact to ubiquity within a short period of time. For

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[1]Our reference discipline for this response is informing science, a transdiscipline that examines informing processes using a generalized informer–client model drawing upon diverse disciplines including MIS, education, library science, computer science, and philosophy. We employed this model in our recent *MIS Quarterly* Issues and Opinions piece (Gill and Bhattacherjee 2009).

office automation, that period was from about 1981, with the introduction of the personal computer, to the late 1980s, by which time the islands of automation had been merged by productivity and networking software at many large- and medium-sized businesses. Today, we cannot imagine our professional lives without office automation tools. For CASE, this period extended from the mid-1980s, when such tools were first introduced, to the mid-1990s, by which time visual programming environments with embedded CASE features were employed in many software development firms, and subsequently institutionalized in many IS programs worldwide. For e-commerce, the period began with the diffusion of commercial web browsers in the mid-1990s and continued until the mid-2000s, by which point e-commerce use had become nearly universal and interest began to shift to more specialized subdomains, such as online auctions, as well as to the emerging area of Web 2.0 applications, such as social networking technologies. BPR—Baskerville and Myers's fourth example—is not a technology nor is its practitioner and research interest limited to MIS. It is, however, frequently implemented using enterprise resource planning (ERP) systems, first introduced in the early 1990s and is now familiar to most managers in Western organizations. Interestingly, practitioner publications in ERP peaked around the year 2000, just about the time that academic publications began to ramp up (Ramiller et al. 2008).

If these four technologies were truly fashions, users would have subsequently abandoned them in favor of other passing technological fancies. But such is clearly not the case. All of these technologies are still widely used in practice. Does their publication pattern really correspond to a fashion, or just the completion of a successful informing process? Both informing successes and fashion waves produce the same shape of publication curve.

Since BPR has had the longest duration among Baskerville and Myers's four examples and is also the least technology-specific, it provides an instructive case for comparing informing and fashions. BPR can be characterized as a fashion if the interest in BPR completely dies out and if the concept is not incorporated within other research not specifically focused on BPR (since incorporation within other research would suggest that it has become an institutionalized process that no longer needs to be explained). Figure 1 shows a plot of the publication count of academic and practitioner BPR articles over the last 16 years. Even a dozen years after its peak, it does not appear that interest in BPR has disappeared, but rather that it continues at a reduced level.

Figure 2 shows the ratio of BPR matches in the abstract divided by matches in full-text articles. We use this ratio to examine the degree to which BPR research has been institutionalized within other business research. We see a sharp spike in early years, when the concept was new and demanded explanation, followed by a gradual settling to about half of the articles treating BPR as central, while half reference it in other contexts. This pattern suggests that BPR has moved from the novelty phase to the institutionalization phase, rather than being discarded as a fashion would have been.

An Informing Model of IS Research

Baskerville and Myers emphasize the participation of academic research in fashion waves. As a consequence, their model predicts that academic and practitioner publication waves parallel each other (with academic publications currently lagging practice). In contrast, we argued in our recent article (Gill and Bhattacherjee 2009) that academic research is increasingly being decoupled from practice, which implies that academic publication patterns should be able to exist entirely independent of interest in practice.

To explain briefly, our model is based on the observation that commercial and academic publishing decisions are driven by totally different forces. Commercial publications tend to be profit driven, and substantial effort is therefore expended on matching content to client interests. An example of this is the "topics of interest" card often included in these publications. We would, therefore, expect topics to be driven by reader (*client*) interests, which are often new technologies of potential organizational relevance. These interests may or may not constitute fashions.

The content of academic publications, on the other hand, tends to be to driven by the authors (*senders* or *informers*). The ability of researchers to choose their own topic is a central tenet of academic freedom. Freedom does not come without limits, however. In fields like MIS, individual career success tends to hinge on the number of publications in desired outlets and upon the degree to which these publications are cited by others. To achieve the former, the topic must be interesting to reviewers and editors. In his classic article, Davis (1971, p. 313) states "an *interesting* proposition is always the negation of an accepted one." A new research area is less likely to have a set of well-developed propositions that can be challenged, and hence "rational" authors should tend to gravitate to mature research areas with established bases of knowledge and propositions. Likewise, citation counts are likely to be higher in mature research areas with a large audience base, which serves to provide the opportunity to cite other researchers and be cited by other researchers.
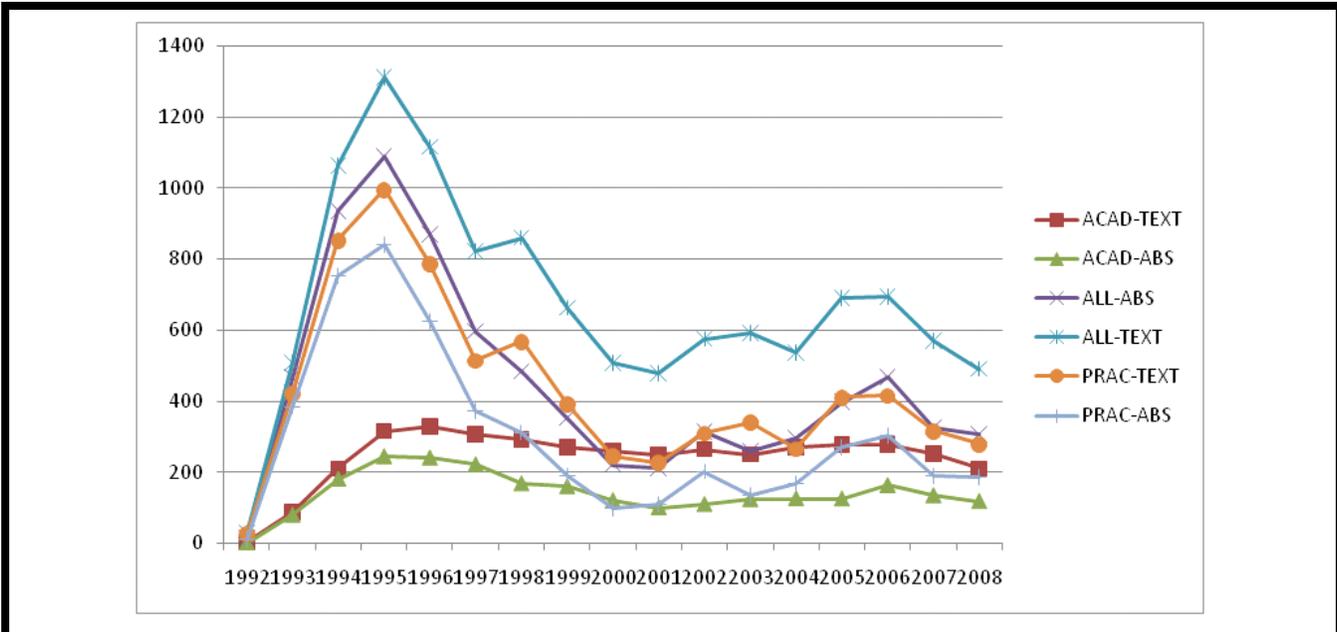
Figure 1. Publication Counts of Articles in ABI INFORM Databases by Year for Academic (ACAD) and Practitioner (PRAC) Articles for "Business Process Reengineering" Appearing in Abstract (ABS) and Full Text (TEXT)
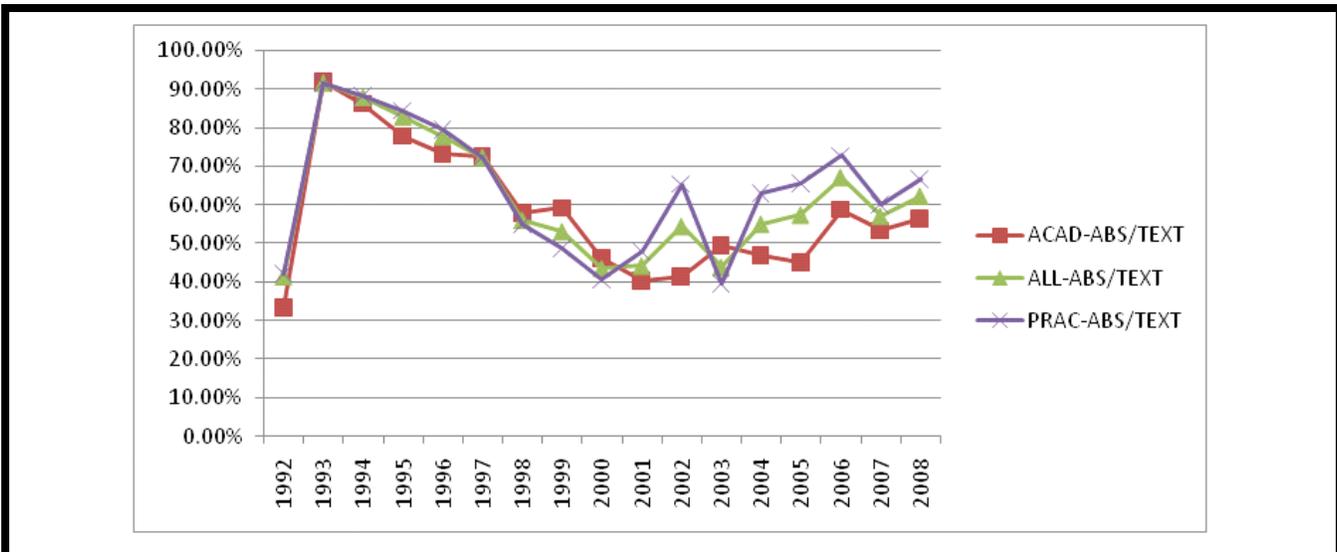

Figure 2. Ratio of Abstract to Full Text (ABS/TEXT) References to "Business Process Reengineering" for Academic (ACAD) and Practitioner (PRAC) Publications from ABI Inform Databases

This creates a perfect climate for an information cascade (Gill 2008), since the desirability of a topic is heavily influenced by the observed percentage of people already pursuing in the topic. Eventually, as a topic becomes heavily researched, interesting propositions become hard to find. At that point of staleness, publications can begin to tail off, in which case, academic research should resemble fashion curves as proposed by Baskerville and Myers.
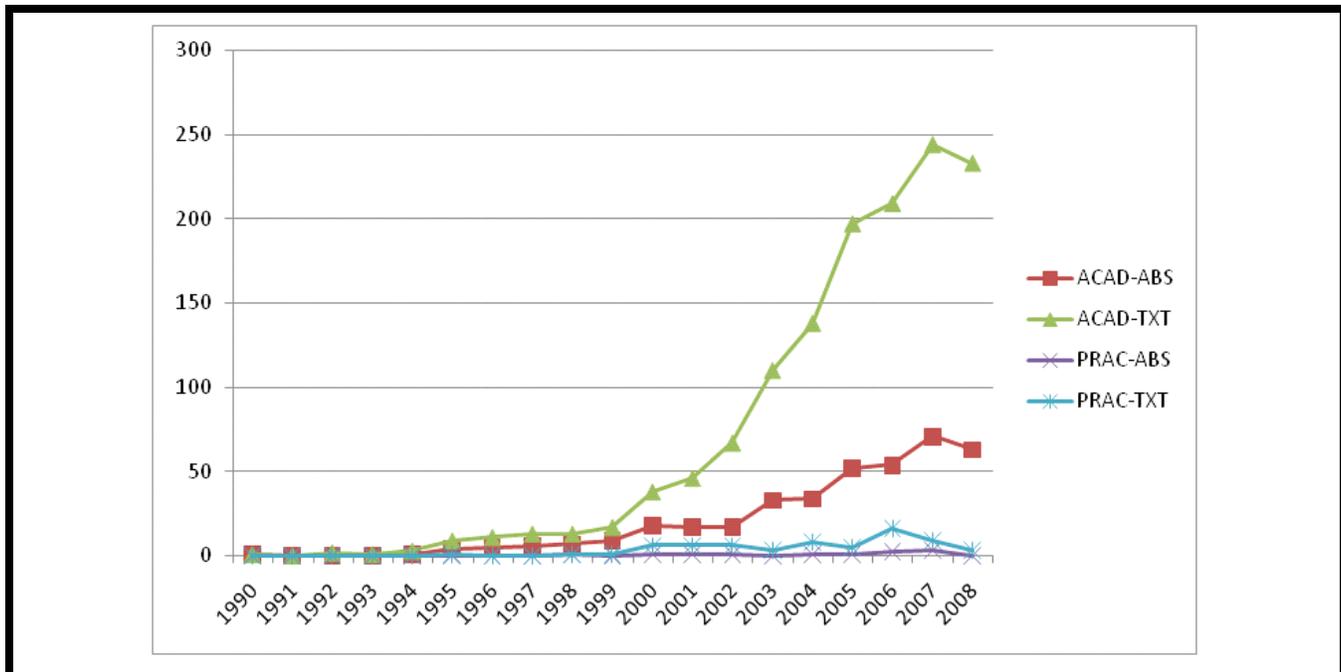
Figure 3. Counts of Articles Containing "Technology Acceptance Model" in Abstract/Citation (ABS) or Full Text (TXT) for Academic (ACAD) and Practitioner (PRAC) Publications by Year

To support our view that academic publication waves are not tightly linked with practice, we examine research publications referring to the technology acceptance model (TAM). As illustrated in Figure 3, that topic has garnered interest levels comparable to those of BPR among MIS researchers while achieving negligible traction in practice-oriented publications, although it have diffused to practice through the students we have educated. This evidence shows that significant academic waves can exist even in the absence of corresponding practitioner waves, demonstrating that IS research does not necessarily follow the same fashions as IS practice.

Recommendations

Despite our contention that Baskerville and Myers's depiction of IS fashions can be better viewed as an informing process driven by the diffusion of innovations perspective, some of their recommendations prove to be quite similar to those derived from our informing model. Baskerville and Myers's first recommendation, that IS research should participate more directly at the beginning of the fashion-setting process using research methods such as action research, design science, and practice research, is similar to our recommendation regarding the need for increased practitioner involvement in IS research. This involvement will not only inform researchers of the latest

trends, issues, and problems facing the practitioner community but will also serve us in informing practitioners of IS research findings and how they apply to their practice. One of our other recommendations, encouraging hybrid academic–practitioner doctoral programs, was similar in spirit. By bringing practitioners into IS academia, familiarizing them with our research, and then encouraging them to return to practice, we can establish informing channels to the practice community that can be sustained for decades.

Baskerville and Myers's second recommendation is that IS research should demonstrate more agility in dropping research topics that have lost interest among practitioners. We find this recommendation to be impractical and troubling. This strategy is impractical because of the time it takes to adequately plan, conduct, and publish research projects. It is troubling because it assumes that research that fails to be of current interest to practitioners is not valuable. Abandoning research projects as soon as these projects lose their practitioner appeal will render much of our research incomplete and unpublishable; that risk will create a perverse incentive *not to* pursue research areas of interest to the practitioner community. While we certainly have voiced our concerns regarding the overall conduct of MIS research, the source of our objection was never that the research could not have *potential* value. Rather, it was that there is no value to

practice-directed research *if effective informing channels to practice are not established*. If we are quick to backtrack and change the course of our research, then difficult problems will never receive the attention they deserve, much less be resolved. Blindly adhering to an agenda driven by what is currently popular in practice would, indeed, be the height of fashion-driven research. Researchers should exercise considerable judgment in their choice and pursuit of research topics, ensuring that *both* relevance and availability of suitable informing channels to practice are given high priorities.

We have no strong objections to Baskerville and Myers's third and fourth recommendations—that we should provide more publication outlets that make IS research readily accessible to practitioners and create new publication vehicles with very short review cycles for delivering fast, concise, up-to-date commentaries and research results to practitioners. Writing for these outlets would provide a good opportunity for us to practice our "thinking like a practitioner" skills. We would caution, however, that attempts to create such publication outlets have already been made (e.g., *MISQ Executive*, whose editorial mission is to improve the accessibility of IS research to practice, and *Communications of the AIS*, with its extremely short review cycles) and do not appear to have solved the problem. This is consistent with our earlier article, where we point out that multimedia channels such as magazines tend to be notoriously ineffective vehicles for diffusion of complex ideas. Ultimately, it will be through direct engagement with practice, not through publication, that MIS researchers will influence practice (outside of whatever indirect, and generally unmeasured, impact we exert through the findings that we teach to our students). Until that time, the best we can hope for is continuing to lag practice, as Baskerville and Myers's charts so aptly demonstrate, since the alternative is not relating to practice at all.

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