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Information Systems as Buzz

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Abstract

Many scholars view the admittedly common tendency toward the coinage and use of “buzzwords” as regrettable and problematic for the information systems (IS) field. Here I suggest instead that the continuing “buzz” associated with IS signals not the field’s muddle-headedness, but rather its vitality and force as reflected in an ongoing cascade of technology-driven organizational innovations. Some buzzwords represent what has been termed *organizing visions* for information systems. Organizing visions arise to facilitate the development and diffusion of IS innovations across firms and industries. While their buzz is therefore important, their history nevertheless also presents us with a history of fuzzy IS types, with implications for research and practice alike.

Introduction

It has been observed by one group of information systems scholars that, “Many a fortune has been made by launching and or merely following a fashion, usually under the banner of some new pseudo-technical jargon. At different times, ‘Management Information Systems,’ ‘Decision Support Systems,’ ‘Expert Systems,’ and so forth, have been the buzzwords under which marketing campaigns have been conducted. Language is used in marketing to create apparent, often illusory or downright fake, product differentiation. ... Thus we need to be wary of the vocabulary in our area.” (Falkenberg, et al, 1998).

As reflected in this observation, many scholars now view this admittedly common tendency toward the coinage and use of “buzzwords” as regrettable and problematic for the information systems (IS) field. Here I suggest that notwithstanding the confusion it generates, this use of jargon and associated hype is instead a phenomenon natural and important to the field’s emergence, growth, and development. The continuing “buzz” associated with IS signals not the field’s muddle-headedness, but rather its vitality and force as reflected in an ongoing cascade of technology-driven organizational innovations. It is in the context of this broader organizational innovation that the commonplace vocabulary of the IS field must be understood.

Organizing Visions and Their Buzz

The terms “Management Information Systems,” “Decision Support Systems,” “Expert Systems,” and the like represent what has been termed *organizing visions* for

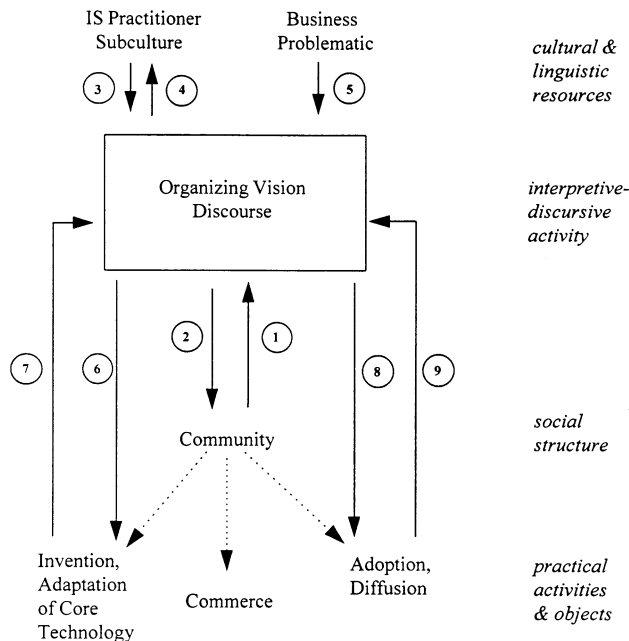
information systems (Swanson and Ramiller, 1997). The concept of an organizing vision helps to explain how many IS innovations apparently originate, develop, and diffuse over time, across firms and industries. Briefly, an organizing vision is defined as a focal community idea for the application of information technology in organizations (Ibid, p. 460). The focal community is understood to come together in the inter-organizational field. The organizing vision is thus the community’s vision for organizing in a way that embeds and utilizes new IT in organizational structures and processes. It frequently purports to identify and characterize a new information system “type.” ERP (enterprise resource planning) systems, CRM (customer relationship management) systems, and data warehouses provide current, highly visible, examples.

Organizing visions are understood to arise because they serve three basic functions in the creation and promotion of IS innovations: those of interpretation, legitimation, and mobilization. The vision’s function in interpretation is to develop a “story” that identifies and explains the innovation’s existence and purpose relative to the broader context while also reducing perceived uncertainties associated with the innovation’s nature and the opportunities it presents to potential adopters. The vision’s function in legitimation is to develop the underlying rationale for the innovation such that it is grounded in broader business concerns and in the reputations and authority of those who promulgate and adopt it. Its function in mobilization is to help activate, motivate, and structure the entrepreneurial and market forces that emerge to support the material realization of the innovation.

Figure 1 summarizes our notion of the institutional production of organizing visions. Following roughly the circled numbers shown, the vision is first produced and sustained through a discourse, the parties to which constitute a heterogeneous community united by a common interest in shaping it. The community’s interactions feature both agreement and disagreement about the vision’s essential content. Particular impetus is given to the vision’s production through commerce and the concomitant contention and cooperation among networks of enterprises with material stakes in the community’s interpretation. The discourse sustains mutual intelligibility because it draws meanings and language from a store of cultural and linguistic resources provided in the subculture of IS practitioners and in the world of business and management more broadly. With respect to the latter, the vision’s representation as a response to an important business problematic is central

to establishing its currency and relevance in the material economy. Its production is also occasioned by the emergence of, seeks to exploit, and is constrained by a core technology and its capabilities. Finally, the organizing vision is formed and reformed in the ongoing interpretation of the innovation's adoption and diffusion in practice.

Figure 1. The Production of Organizing Visions (adapted from Swanson and Ramiller, 1997)



It may be observed that organizing visions tend to have careers over which they vary substantially in their visibility, prominence, and influence. Most significantly, in the context of the present discussion, the organizing vision is typically identified rather early in its history by a specific name or label. This name serves essentially as a hoisted standard around which people can rally in interpretive communication with one another. The label itself is often disparagingly characterized as a “buzzword,” perhaps an apt description given the audible discourse surrounding it. Interestingly, the more audible this buzz, the livelier likely is the concept, although not through any agreed-upon definition so much as through the underlying practical and obviously commercial activities associated with it.

Fuzzy Types and Their Attractions

Where there is conceptual buzz there is likely also fuzz. While definitions are put forth, they frequently collide, or they are so sweeping that they do not distinguish. Organizing visions thus exemplify the fuzzy or ill-defined concepts of which many believe that there are all too many (Falkenberg, et al, 1998, p. 2). The apparent paradox is that this fuzziness marks their very

usefulness to diverse stakeholders, even while it admittedly obscures the referent and hampers precise communication.

Interestingly, organizing visions and their associated terms are fuzzy precisely because they are in the process of being worked out within the community. This “working out” takes place at different levels. At the interpretive-discursive level, the buzzword itself is engaged as to whether it represents anything “real” and new and important and deserving of the community’s attention. Vendors, consultants, pundits, scholars, and others stake their various claims and participate in the general debate, often with considerable passion. Meanwhile, on the playing field of practical activities, new information systems are developed and put into place in organizations. These new IS may indeed be conceived following an organizing vision or they may alternatively be reinterpreted in such terms somewhat after the fact. But what is being “worked out” at the level of practical activities is not the fuzzy concept as such, but rather the practicality and usefulness of the IS initiatives themselves. It is from this collective innovative experience that the community seeks most importantly to inform itself while gathered under the banner of the organizing vision.

Eventually, the career of an organizing vision, being essentially a product of the discursive energies of the community, begins an inevitable decline. The community turns its attention elsewhere, as newer and fresher visions arise to capture its imagination. The older vision becomes outmoded or simply tiresome. In some cases, the label itself may come into some disrepute as the vision is challenged as an old and perhaps not such a good idea after all. Witness the present waning enthusiasm for traditional ERP as firms turn instead to the Web as the technology that will now sweep away all before it, for example (see “A Belated Rush to the Net,” *Business Week*, October 25, 1999). Thus, as the enthusiasm associated with a fashionable organizing vision inevitably wanes, the vision itself fades in prominence and its buzzword loses its hum. Interestingly, the basic concept, having been stretched in all likely directions by its proponents, may also often be no more clearly defined than before. And so, over time, the IS field has come to be characterized by what could be called a history of fuzzy types.

While some scholarly observers may look aghast upon this tawdry conceptual history, others may choose to examine it more closely. After all, the history of organizing visions for IS provides a conceptual forest within which the researcher may trace the development of the field. Thus, for example, Ein-Dor and Segev (1993) present a classification of IS which includes seventeen basic types (including management information systems, decision support systems, and expert systems) compared via multidimensional scaling techniques in terms of their attributes and functions as discussed in the literature.

They further examine the first mention of each type in the trade publication *Datamation* and offer an interpretation of the collective technological evolution of IS from the field's beginnings. What is especially interesting about their analysis from our viewpoint is that it is based largely on the historical discourse about IS rather than on the empirical study of IS found in the field of practice. It is, in other words, a study and analysis of organizing visions for IS. That the relationships between the studied types are also found to be rather fuzzy should, in the context of the present discussion, therefore not be a disappointment to scholars!

Implications

Returning to where we began above, information systems scholars should indeed be wary of the vocabulary common to their area. But they should further be alert to it with respect to what it signals, bearing in mind that organizing visions that achieve a notable buzz are unlikely to have been constructed out of a marketing campaign's whole-cloth. Rather, prominent organizing visions typically reflect convergent if not always consistent perceptions of new technological opportunities for information systems, suggesting new forms, often illuminated by a few pioneering examples, potentially marking significant breaks from the past. Indeed, their associated buzzwords are sometimes coined and promulgated by research firms such as Gartner Group and Forrester Research which devote their efforts to monitoring and interpreting industry events and trends. The precautionary implications for researchers and practitioners are several.

First, theoretical researchers, while they may well be annoyed by buzzwords, should probably not confuse the clarity of their own formal work and definitions with the broader eradication of information systems fuzz. The power of researchers' formal constructions lies mostly elsewhere, within their associated theories as integrated wholes, with eventual application to wider descriptive or prescriptive understandings. Occasionally, such theory does come to clarify an important concept previously poorly understood, as in the case of database, now underpinned and illuminated by the relational model, for example. However, most information systems fuzz arises not out of some formal definitional vacuum, but rather naturally from the discourse which is characteristic of organizing visions to guide practical activities, where the application of new technology is also likely to be highly problematic. As such, this fuzz is likely to be largely "immune," especially in the shorter run, to formal theory. And perhaps it should not by itself worry theoreticians.

By the same token, empirical researchers should not confuse the current buzz about information systems with the existing population of systems deserving of study. Perhaps much too frequently for their own good,

empirical researchers seem to be attracted to the "latest and the greatest" just like everyone else. They plunge in to make observations of scattered and ill-understood phenomena still under substantial development and change, coming too often to findings destined to evaporate in their relevance much too soon. They tend to ignore that which has become widespread, well established and even mundane, and therefore fail to make the more obvious observations and draw the needed longer-term, underlying lessons for us. Thus, transaction processing systems (TPS) may be the most important and widespread of all information system types among enterprises, as the recent Y2K crisis has reminded us, and yet the accumulated body of research on TPS appears to be rather thin.

For IT practitioners, the precautionary implications are rather different. While they may sometimes bemoan the difficulty in comprehending a new organizing vision, practitioners are usually not in a position to ignore its buzz. After all, for them, the status quo is rarely for long a defensible location. Especially not when consultants and vendors swirl around senior management, eager to bring ready-made "business solutions" to close problematic "performance gaps." Thus, managers of IT find themselves on the strategic hot seat, challenged to respond intelligently to the visions sweeping through their field (Ramiller, 1999). In the end, then, managers may have little choice but to immerse themselves in the buzz and strive to grasp the true nature of underlying developments, such that they position themselves and their firms advantageously toward them. In sum, information systems buzz is not to be dismissed. Rather, it presents practitioners with one of their greatest challenges.

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