

2 ORGANIZATIONAL DYNAMICS OF TECHNOLOGY-BASED INNOVATION: Diversifying the Information Systems Research Agenda¹

Robert D. Galliers
*Bentley College
Waltham, MA, U.S.A.*

Tempora mutantur, et nos mutamur in illis²

This keynote address takes up the conference theme and argues for greater diversification and innovation—in method and topic—in Information Systems research and curricula design. Basing my arguments on my own—and others’—recent critiques of calls for a narrowing of our focus on the information technology artefact and IS design, I will highlight the expanding boundary of the field of Information Systems and what this means for the IS academy in terms of innovation and diversification in our research and teaching.

In some respects, and despite its relatively recent emergence as a field of study, Information Systems may go down in history as a field that has done more navel-gazing than any other. Following the publication of a paper in *MIS Quarterly*, which called for a return to the discipline’s [*sic*] “core properties” (Benbasat and Zmud 2003), there was a crescendo of debate that argued pro and con (e.g., Alter 2003; King and Lyytinen 2006). But the debate did not start there. For example, back in 1970, Zani produced his “Blueprint for MIS,” and in 1973, Langefors provided “a theoretical analysis” of Information Systems. Keen (1980) considered the field’s reference disciplines and called

¹This paper builds on and extends arguments published earlier (see Galliers 2003, 2006).

²“Times change, and we change with them” (quoted in Harrison, *Description of Britain*, Pt. III, Ch. iii, 1577).

Please use the following format when citing this chapter:

Galliers, R. D., 2007, in IFIP International Federation for Information Processing, Volume 235, *Organizational Dynamics of Technology-Based Innovation: Diversifying the Research Agenda*, eds. McMaster, T., Wastell, D., Ferneley, E., and DeGross, J. (Boston: Springer), pp. 15-18.

for a “cumulative tradition.” In 1985, I myself went looking for “a paradigm” for Information Systems research (Galliers 1985). Soon afterward, my colleague at Bentley College, Mary Culnan, wrote on the “intellectual development” (1986) and “intellectual structure” (Culnan 1987) of MIS; Banville and Landry (1989) asked whether MIS could “be disciplined”; Backhouse, Liebenau, and Land (1991) considered the domain of the “discipline of Information Systems.” More recently, Orlikowski and Iacono (2001) went (“desperately”) to seek “the IT in IT research,” and Weber (2003) was still desperate two years later. I could go on.

Why all this introspection? Another Bentley colleague of mine—Lynne Markus—poses the question: “What happens if the field of IS goes away?” (Markus 1999), a view echoed by Lucas (1999). For Markus, we are at a crossroads. Either we become one of the truly important fields in business, or—alternatively—different aspects of the field devolve into other subject areas of business. So concerned are some of our colleagues about the latter scenario that they argue for disciplinary purity—only by returning attention to the IT artefact, and focusing on IS design and development as the discipline’s “core” (e.g., Benbasat and Zmud 2003, 2006) will we retain our place in the academic universe.

In this presentation, a contrary stance is taken. Developments in the field are viewed as a case of natural evolution. There is an implicit, early Kuhnian worldview underpinning Benbasat and Zmud’s and Weber’s arguments. A central feature of Kuhn’s earlier consideration of scientific communities (Kuhn 1961) was the concept of paradigm—a monistic vision of science, which required revolution to take place in order for any movement from the core. Banville and Landry (1989, p. 49) develop the theme:

[Adherents to this view] use the term paradigm as meaning [that] members of a scientific discipline...always know precisely the relevant research topics... the appropriate research methods and the proper interpretation of results.

The argument I put forth in my earlier work (Galliers 2003, p. 156) takes on a very different interpretation: “any field that is able critically to reflect on itself and range widely over related subject matter actually enhances its legitimacy.” On reflection, Benbasat and Zmud are modernists, while I take a post-modernist stance.

Postmodernism rejects boundaries and rigid genre distinctions. It emphasizes pastiche, parody, and bricolage. It favors reflexivity and self-consciousness, fragmentation and discontinuity, ambiguity. It places emphasis on the deconstructed, the decentered, and the absence of solutions. While much the same can be said of modernism, postmodernism differs in relation to its stance on these issues. Modernism—like postmodernism—presents this fragmented view of human subjectivity, history and the world we live in, but does so with a measure of angst. It presents this fragmentation as something tragic, something to be lamented and something to be concerned about. I see the arguments of Benbasat and Zmud, and Weber, among others, in this light. They, like many modernist thinkers, try to uphold the idea that we as a “discipline” should accentuate the unity, coherence, and meaning that they lament as being lost in much of recent IS literature that has somehow forgotten the “core”—which in

their terms is the IT artifact. Postmodernism, in contrast, doesn't lament the idea of fragmentation, provisionality, or incoherence, but rather celebrates all this. The world is meaningless? Let's not pretend that we can make meaning then, let's just play with nonsense; let's enjoy the incongruities, the range of stances we take, and the emergence—the new knowledge that arises from the confluence of ideas emanating from our different worldviews. Let's continue to explore terra incognita. Who knows what we might find. In other words: "Don't worry, be happy" (Galliers 2006, p. 326).³

This keynote presentation will develop the theme of emergence and innovation, emphasizing the need for a dynamic, explorative approach to the IS field—one that is transdisciplinary by its very nature, and one that ranges from user interaction with the technological artefact—yes—but one that has also expanded—most appropriately—to concern itself with, for example, societal, ethical and global issues (Galliers et al. 2007). This is how diversity and innovation in our field is to be found.

References

- Alter, S. "The IS Core – XI: Sorting Out the Issues about the Core, Scope, and Identity of the IS Field," *Communications of the AIS* (12:41), November 2003, pp. 607-627.
- Backhouse, J., Liebenau, J., and Land, F. "On the Discipline of Information Systems," *Journal of Information Systems* (now *Information Systems Journal*) (1:1), January 1991, pp. 19-27.
- Banville, C., and Landry, M. "Can the Field of MIS be Disciplined?," *Communications of the ACM* (32:1), January 1989, pp. January, 48-60.
- Benbasat, I., and Zmud, R. "Further Reflections on the Identity Crisis," in J. L. King and K. Lyytinen (eds.), *Information Systems: The State of the Field*, Chichester: Wiley, 2006, pp. 300-306.
- Benbasat, I., and Zmud, R. "The Identity Crisis Within the IS Discipline: Defining and Communicating the Core's Properties," *MIS Quarterly* (27:2), June 2003, pp. 183-194.
- Culnan, M. "The Intellectual Development of Management Information Systems, 1972-1982: A Co-citation Analysis," *Management Science* (32:2), February 1986, pp. 156-172.
- Culnan, M. "Mapping the Intellectual Structure of MIS, 1980-1985: A Co-citation Analysis," *MIS Quarterly* (11:3), September 1987, pp. 341-353.
- Galliers, R. D. "Change as Crisis or Growth? Towards a Transdisciplinary View of Information Systems as a Field of Study: A Response to Benbasat and Zmud's Call for Returning to the IT Artifact," *Journal of the Association for Information Systems* (4:6), 2003, pp. 360-376.
- Galliers, R. D. "'Don't Worry, Be Happy...': A Post-Modernist Perspective on the Information Systems Domain," in J. L. King and K. Lyytinen (eds.), *Information Systems: The State of the Field*, Chichester: Wiley, 2006, pp. 324-331.
- Galliers, R. D. "In Search of a Paradigm for Information System Research," in E. Mumford, R. Hirschheim, G. Fitzgerald, and A. T. Wood-Harper (eds.), *Research Methods in Information Systems*, Amsterdam: North-Holland, 1985, pp. 85-94.
- Galliers, R. D., Markus, M. L., and Newell, S. (eds.). *Exploring Information Systems Research Approaches: Readings and Reflections*, Abingdon, Oxford: Palgrave, 2007.

³This quote draws heavily from Mary Klage's course syllabus on modern critical thought at the University of Colorado (<http://www.colorado.edu/English/courses/ENGL2012Klages/pomo.html>).

- Keen, P. G. W. "MIS Research: Reference Disciplines and a Cumulative Tradition," in E. R. McLean (ed.), *Proceedings of the First International Conference on Information Systems*, Philadelphia PA, 1980, pp. 9-18.
- King, J. L., and Lyytinen, K. (eds.). *Information Systems: The State of the Field*, Chichester: Wiley, 2006.
- Kuhn, T. S. *The Structure of Scientific Revolution*, Chicago: University of Chicago Press, 1961.
- Langefors, B. *Theoretical Analysis of Information Systems*, Philadelphia, PA: Auerbach, 1973.
- Lucas, H. "The State of the Information Systems Field," *Communications of the AIS* (1:5), 1999.
- Markus, M. L. "Thinking the Unthinkable: What Happens If the IS Field as We Know it Goes Away?," in W. Currie and R. D. Galliers (eds.), *Rethinking MIS*, Oxford: Oxford University Press, 1999, pp. 175-203.
- Orlikowski, W., and Iacono, S. "Desperately Seeking the 'IT' in IT Research," *Information Systems Research* (7:4), 2001, pp. 400-408.
- Weber, R. "Still Desperately Seeking the IT Artifact," *MIS Quarterly* (27:2), 2003, pp. iii-xi.
- Zani, R. "Blueprint for MIS," *Harvard Business Review*, November-December, 1970, pp. 95-100.

About the Author

Appointed as Provost of Bentley College in 2002, **Bob Galliers** was previously Professor of Information Systems and Research Director in the Department of Information Systems at the London School of Economics. Before joining LSE, he served as Lucas Professor of Business Management Systems and Dean of Warwick Business School in the UK, and earlier as Foundation Professor and Head of the School of Information Systems at Curtin University in Australia. Bob is editor-in-chief of *Journal of Strategic Information Systems*, and a fellow of the British Computer Society, the Royal Society of Arts, and the Association for Information Systems (AIS), of which he was president during 1999. He has held visiting professorships at INSEAD (France), University of St. Gallen (Switzerland), City University of Hong Kong, Institute for Advanced Management Studies (Belgium), National University of Singapore, Hong Kong Polytechnic University, and Bond University (Australia). He has published widely in many of the leading international journals on Information Systems and has also authored/edited a number of books, the most recent being *Exploring Information Systems Research Approaches* (Routledge, 2007), the third edition of the best seller, *Strategic Information Management* (Butterworth-Heinemann, 2003), *Rethinking Management Information Systems* (Oxford University Press, 1999), and *IT and Organizational Transformation* (Wiley, 1998). He holds an AB degree with honors in Economics from Harvard University, an MA with distinction in Management Systems from Lancaster University, and a Ph.D. in Information Systems from the London School of Economics. He was awarded an Honorary Doctor of Science degree by Turku University of Economics and Business Administration, Finland, in 1995. His research focuses in the main on information systems strategy and the management of change associated with the adoption and appropriation of ICT-based systems within and between organizations. Bob can be reached by e-mail at rgalliers@bentley.edu.