Association for Information Systems
AIS Electronic Library (AISeL)

ICIS 1997 Proceedings

International Conference on Information Systems (ICIS)

December 1997

Panel 7 Using Multiple Methods in Studying Information Systems: Some Experiences

Steve Sawyer
Syracuse University

Jay Cooprider
Bentley College

Robert Galliers
University of Warwick

Michael Gallivan
New York University

Bonnie Kaplan
Quinnipiac College

PANEL 7

USING MULTIPLE METHODS IN STUDYING INFORMATION SYSTEMS: SOME EXPERIENCES

Chair: **Steve Sawyer,** Syracuse University

Panelists: **Jay Cooprider**, Bentley College
Robert Galliers, University of Warwick
Michael Gallivan, New York University
Bonnie Kaplan, Quinnipiac College

The evolving pluralism of research methods being used to study the roles of information systems (IS) in organizations makes multi-method research a seemingly valuable approach (Fitzgerald et al. 1985). There are at least two reasons that underlie the potential value of multiple methods. The first reason is that using multiple methods is one mechanism to cope with the limitations inherent in any one research method (Campbell and Stanley 1966). The second reason is that multi-method research is more than using two disparate methods (generally a quantitative and a qualitative method) in the course of one research effort: it is its own method (Brewer and Hunter 1989; Jick 1979).

Despite the potential value, however, multi-method research is used infrequently in IS research (Orlikowski and Baroudi 1991; Gallivan 1997). This occurs despite the increasing acceptance of multiple research methods in IS research. This dichotomy—apparent value set against limited use—seeds the discussion of the issues and choices involved in the appropriate use of disparate methods in multi-method combination (e.g., Kaplan and Duchon 1988; Wynekoop and Russo 1993). This panel brings together researchers who have done multi-method research on IS in organizations to discuss their experiences with using multiple methods. The panel has four goals:

1. *To define what we mean by multi-method research and highlight issues with conducting multi-method research.* For this panel, multi-method research means a triangulation between or across methods, drawn from the same population, which extensively integrates both fieldwork and survey research. Issues include (a) the role of theory in uniting disparate data collection methods, (b) data collection method independence and interdependence, (c) influence of the method on the respondents, (d) integrating analysis of different data, and (e) using the data analysis for both comparison and contrast.

2. *To provide examples of, and share experiences with, multi-method research in IS.* To do this, two perspectives on multi-method research are presented. These highlight some of the issues, and dilemmas, in conducting multi-method research.

3. *To discuss implications for presenting multi-method research*, to include (a) issues of rigor and relevance in presenting combined methods, (b) appropriate strategies for combining the analysis of both quantitative and qualitative data (e.g., joint or separate, sequential or integrated), and (c) dealing with contradiction and corroboration in mixed-method data analysis.

4. *To provide a forum for the audience and panelists to engage in discussion*.

Presentations will be kept terse and structured to highlight debatable points.

REFERENCES

Brewer, J., and Hunter, A. *Multi Method Research: A Synthesis of Styles*, Sage, Newbury Park, CA, 1989.

Campbell, D., and Stanley, J. *Experimental and Quasi-Experimental Designs for Research*, Rand McNally, Chicago, 1966.

Fitzgerald, G.; Hirschheim, R.; Mumford, E.; and Wood-Harper, T. "Information Systems Research Methodology: An Introduction to the Debate," in *Research Methods in Information Systems*, E. Mumford, R. Hirschheim, G. Fitzgerald, and T. Wood-Harper (eds.), North-Holland, Amsterdam, 1985, pp. 3-12.

Gallivan, M. "Value in Triangulation: A Comparison of Two Approaches for Combining Quantitative and Qualitative Methods," in *Information Systems and Qualitative Research*, A. Lee, J. Liebenau and J. I. DeGross (eds.), Chapman and Hall, London, 1997, pp. 417-443.

Jick, T. "Triangulating on Mixing Qualitative and Quantitative Methods: Triangulation in Action," *Administrative Science Quarterly* (24), 1979, pp. 602-611.

Kaplan, B., and Duchon, D. "Combining Qualitative and Quantitative Methods in Information Systems Research: A Case Study," *MIS Quarterly* (12:4), 1988, pp. 571-586.

Orlikowski, W., and Baroudi, J. "Studying Information Technology in Organizations: Research Approaches and Assumptions," *Information Systems Research* (2:1), 1991, pp. 1-28.

Wynekoop, J., and Russo, N. "System Development Methodologies: Unanswered Questions and the Research-Practice Gap," in *Proceedings of the Fourteenth International Conference on Information Systems*, J. I. DeGross, R. P. Bostrom, and D. Robey (eds.), Orlando, FL, 1993, pp. 181-190.