PANEL 18 ALTERNATIVE RESEARCH METHODOLOGIES IN BEHAVIORAL INFORMATION SYSTEMS RESEARCH

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ALTERNATIVE RESEARCH METHODOLOGIES IN BEHAVIORAL INFORMATION SYSTEMS RESEARCH

Panel Chair: Margrethe Olson, New York University
Panelists: Jack Baroudi, New York University
Sue Conger, Georgia State University
Allen Lee, Northeastern University
Jane Webster, Pennsylvania State University

This panel examines alternative research methodologies in behavioral IS research. The first panelist reports on three characteristics of the predominant research methodology used in IS research. The following panelists then respond to each of these characteristics by discussing and illustrating alternative methodologies. The next panelist takes a converse posture: he argues that the predominant methodology will remain the core one for most IS research. The final panelist responds to the previous speakers.

Drawing from the major IS publication outlets, Baroudi categorizes the research methodologies used in the behavioral IS literature research. He categorizes the publications by research design, by underlying epistemology, and by time period. First, he reports that case studies, lab experiments, and surveys accounted for almost 90 percent of the studies. Second, in 73 percent of the studies, positivism was the underlying epistemology. Last, one-shot cross-sectional studies comprised over 90 percent of the articles. From this, he concludes that behavioral IS research has a dominant methodological paradigm: survey or laboratory research conducted at one point in time, with an underlying positivist epistemology. He therefore argues that IS research requires additional methodological paradigms.

Because of the importance of survey questionnaires to garner users’ perceptions, feelings, and reactions to information systems, Webster reports on the use of videotaping as a supplement to questionnaires. Traditionally, videotaping in IS research has been used to capture more objective data, such as reaction times or keystroke data. Here, she discusses the pros and cons of videotaping to capture users’ subjective reactions to information systems and uses data from a recent study of users’ reactions to spreadsheet packages to illustrate her discussion.

Lee discusses the value of taking an interpretive approach to IS research. He presents the merits of interpretive research methodology in contrast to the merits of positivist research methodology. He details how interpretivism serves the goal of understanding human meaning; positivism, the goal of explaining invariant relationships among variables. To illustrate his points, he refers to studies, appearing in the IS literature, whose purpose has been to assess the Nolan stage hypothesis. He argues that the promise of positivism, as manifested in these studies, has reached its limits and he explains how interpretivism may support this line of research in transcending these limits.

In lieu of one-shot studies, Conger discusses the advantages and disadvantages of behavior sampling over time. By behavior sampling, we mean structured observations of users interacting with information systems over time. She examines the applicability of this technique for behavioral IS research and argues that it is a powerful method for achieving triangulation of results along with other, more typical methods of data collection. Again, she illustrates the method with results from a recent study of information technologies used for organizational coordination.

Olson will comment on the previous speakers’ positions. She will then take a broader view of alternative methodologies in information systems and will reflect on the future for behavioral IS research methodologies.