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Panel 17 Resolved: Surveys Have Outlived Their Usefulness in IS Research

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PANEL 17

RESOLVED: SURVEYS HAVE OUTLIVED THEIR USEFULNESS IN IS RESEARCH

Panel Chair: **Peter Newsted**, University of Calgary

Panelists: **Wynne Chin**, University of Calgary
Ojelanki K. Ngwenyama, University of Michigan
Allen Lee, McGill University

INTRODUCTION (Peter Newsted)

Surveys are still not done well. The use of survey questionnaires may be counter-productive if the conclusions drawn from them have not been rigorously established. Trends seen in the Calgary Surveys Query System through 1991 (Munro, Newsted, and Huff 1994) show that less than 40% of published surveys meet even minimum standards of psychometric rigor — let alone employ appropriate modeling techniques. Pinsonneault and Kraemer (1993) have reached a similar conclusion. Selected data since 1991 will be presented to show the current level of rigor in surveys. In addition it will be argued by the panelists that surveys do not give us the whole picture or even a rich enough picture to fully understand what is happening in IS within an organization. Further, they may be a completely incorrect way to even seek such knowledge. As a way of integrating all of the panelists' presentations, a new research area such as electronic volunteerism (which is in need of theoretical development) will be introduced at this point. All panelists will address their remarks to this area.

Thus, if we can't trust surveys and they give us only limited information, shouldn't their use be discontinued or dramatically curtailed? Alternately, if we do continue to use surveys, both the MIS community and researchers must do things to improve the current state of survey-based research as well as recognizing their limitations and the usefulness of alternatives.

The panelists will discuss these points and encourage the audience to share their thoughts —whether pro or con — regarding their experiences with MIS surveys. To stimulate this discussion, the initial point will be made that potential respondents — especially in the business community — have been inundated with surveys, and hence we will suggest that all surveys be “vetted” by a central body before they are administered. This is likely quite controversial and alternate ways of not overwhelming important respondents with questionnaires will also be discussed. The issue of having enough questions for a reliable instrument versus the ensuing “respondent burden” will also be raised.

PRO: SURVEYS “JUST DON'T GET NO RESPECT” (Wynne Chin)

Surveys are very useful for theory building if one understands what can and cannot be said about how theoretical constructs relate. Real phenomena can be measured and the effect of one phenomenon on another can be determined. Common sense says that survey results should be handled appropriately. However, tools for analyzing survey data, such as structural equation modeling, are often misused. Common sense also says that the audience for survey articles must understand what the results from these tools mean, but this is all too often not the case either. A simple theoretical model about the common research topic will be presented to show how surveys can be correctly used to provide data for such a model to validate such a theory. Ngwenyama and Lee will suggest that this may be premature and is not necessarily the best way to start building a theory in this research area.

Panels

A list of important points in the use and analysis of survey data will be presented. Specific steps should be followed to design good instruments. A list of the required characteristics of good instruments will be presented. While some of these points have been stressed by others (e.g., Straub 1989; Moore and Benbasat 1992), they are still frequently ignored even in published articles.

The MIS community must become proactive to improve standards: journal editors should provide reviewers with a methodology checklist to use when looking at articles with surveys. Part of the abstract (for each article) should indicate the reliability and validity of any instruments that are used in an article.

There needs to be a common repository for information about surveys: both on what has been done and on what needs to be done if one is going to use surveys. The survey web site on ISWorld is the beginning of this (<http://www.ucalgary.ca/~newsted/surveys.html>).¹

There should be a regular or annual workshop/tutorial at ICIS and/or AIS on surveys and modeling with survey data. The curriculum for this could be maintained on the ISWorld survey web site.

CON: SURVEYS DESERVE VERY LITTLE RESPECT BECAUSE THEY TELL US SO LITTLE (Ojelanki Ngwenyama)

More intensive and interpretive research on the computerization process is needed. Recently, interest in process studies that explore the *whole* organization has been increasing, but in general such studies are infrequent in organization science (Pettigrew 1990) and are even less frequent in information systems (Benbasat, Goldstein and Mead 1987; Lee 1989; Pettigrew 1985b). Perhaps the main reason for their infrequency is that they (a) are time consuming, requiring longitudinal data collection and (b) present intractable difficulties for standard nomothetic research methodologies (Monge et al. 1984; Miller and Friesen 1982; Pettigrew 1985a, 1990). Although some researchers have attempted to study organizational processes using survey methods, such studies offer only synchronic snapshots of an organizational process and limited, if any, knowledge on the process dynamics.

Intensive analysis of organizational context, temporal order and the underlying logic of historic events can provide a deeper understanding of organizational processes. The positivist approach of surveys falls short in providing this information. It is essential to determine the meaning that people attach to things and the processes they go through in doing this.

Process-based research (a) focuses on organizational events in their natural settings; (b) explores these phenomena at vertical and horizontal levels; (c) examines their interconnections over time; and (d) develops a systematic description of the properties and patterned relationships of the process which is critical to theory development. In this approach, an organizational process is viewed as an interlocking cycle of social actions, situated within and organizational context, having a temporal dimension. Further, both the organizational process and its context is considered to be socially constructed with specific meanings to the involved organizational actors. The ideographic methods used in the approach enable the researcher to access first level understandings by “getting inside the research situation” and to develop systematically theories which can be later tested in formal experiments (Mintzberg 1979; Eisenhardt 1989; Lee 1989, 1991; Sanday 1979).

This presentation will (a) describe the weaknesses of survey techniques in the study of organizational processes; (b) outline an alternative approach to studying organizational processes and the importance of interpretation — using the common research topic as an example, and (c) outline the strengths and weaknesses of this approach.

RESOLUTION: WHAT IS THE PLACE OF SURVEYS? HOW MUCH RESPECT DO THEY REALLY DESERVE? (Allen Lee)

Surveys are neither inherently a positivist research tool (although many people may think of surveys in this way) nor are they necessarily foreign to interpretive, intensive, and other forms of qualitative research. In fact, surveys can be used in research studies that bridge the quantitative and the qualitative, or the positivist and the interpretive.

¹Conversely, Michael Myers maintains an ISWorld web site on *qualitative* research: <http://comu2.auckland.ac.nz/~isworld/quality.htm>.

Lee will discuss what surveys can and cannot accomplish in positivist research, what surveys can and cannot accomplish in interpretive research, and what surveys can and cannot accomplish in integrated positivist/interpretive research. Lee will illustrate his points using the common research topic and by drawing on published research studies, both inside and outside of the field of information systems. Comments from the audience will be solicited as to what may still be missing from this conceptualization of the research topic.

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