Using the Delphi method to engage stakeholders: A comparison of two studies

Monica R. Geist

University of Northern Colorado, McKee Hall 531 Campus Box 124 Greeley, CO 80639 United States

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ABSTRACT

Involving stakeholders can greatly impact evaluation results. The Delphi method, a consensus-building tool, is a promising process to promote and encourage involvement from all stakeholders during the evaluation framing process. The Delphi method removes geographic challenges and time boundaries allowing all stakeholders to participate. The Delphi method uses a series of surveys interspersed with controlled feedback designed to gather information and build consensus without requiring face-to-face meetings. Two different formats of the Delphi method, a paper-and-pencil, postal-mail version and a web-based, real-time computer version are compared in this study. Both versions of the Delphi were administered to a non-profit community based organization as part of framing an evaluation. Participation rates were better with the paper–pencil version. The quantity and quality of data collected were comparable in both versions.

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1. Introduction

Stakeholder involvement is crucial when evaluating organizations. Involving stakeholders in all phases of the process, including the framing of the evaluation, increases the attention paid to the findings (Cousins & Earl, 1992); helps ensure that relevant questions are asked (Fine, Thayer, & Coghlan, 2000); increases stakeholders' understanding of the organization and the evaluation (Brandon, 1998; Cousins & Earl); promotes a participatory and collaborative relationship between the evaluator and stakeholders (Patton, 1997); and increases the validity of the evaluation findings (Brandon). Including stakeholders in the process also allows the researcher to ask evaluation questions in the shared terms and language of the stakeholders (Patton). In their Program Evaluation Standards, the Joint Committee on Standards provides another compelling reason to involve stakeholders.

> The evaluation should be planned and conducted with anticipation of the different positions of various interest groups, so that their cooperation may be obtained, and so that possible attempts by any of these groups to curtail evaluation operations or to bias or misapply the results can be averted or counteracted (Sanders, 1994, p. 71).

When conducting a participatory and collaborative evaluation, measures should be taken to involve stakeholders who have distinct perspectives on the program. The Joint Committee on Standards suggested "Interview[ing] representatives of major stakeholders to gain an understanding of their different and perhaps conflicting points of view and of their need for information" (Sanders, 1994, p. 38). Common methods used to communicate with stakeholders include focus groups, personal interviews, meetings, semi-structured interviews, and informal interactions (Brandon, 1998).

While meetings are often convenient for collecting information from stakeholders, attendance can be a limitation, as it is not always possible to have all stakeholders represented (Renger & Bourdeau, 2004). As Rossi, Freeman, and Lipsey (1999) pointed out, important groups may be left out of the process even when an evaluation is structured as explicitly participatory and collaborative.

An important time to include stakeholders is during the framing of an evaluation, when evaluators need to be able to assess evaluability (Smith, 1989; Wholey, 1994), as well as efficiently develop and prioritize evaluation questions (Patton, 2002; Rossi et al., 1999; Weiss, 1998). A promising prioritization method involves using a consensus-building tool called the Delphi method (Dalkey & Helmer, 1963; Linstone & Turoff, 1975), where an evaluator or researcher can investigate stakeholders' opinions on the current state of an organization long before a site visit. The Delphi method can be thought of as a series of sequential questionnaires interspersed by controlled feedback (Linstone and Turoff). This information-gathering tool is ideal for evaluation situations where it is difficult to get feedback from stakeholders due to geographical barriers and busy schedules.

E-mail address: monicageist@comcast.net.

1.1. Delphi method as a viable process to frame the evaluation

The aim of this article is to describe a study where a paper–pencil version of the Delphi method (PP Delphi) was compared to a real-time computerized version of the Delphi method (RT Delphi). Both were tested as viable processes of gathering input from stakeholders to assist in framing an evaluation of a non-profit community based organization (CBO). Framing an evaluation consists of several components, beginning with an *evaluability assessment* (Smith, 1989; Wholey, 1994), which is the determination of an organization's evaluation readiness. *Goals clarification* is an important part of assessing evaluability and helps the evaluator determine whether an organization has current, agreed upon, well-defined goals or fuzzy, broad, unrealistic, or exaggerated goals (Patton, 1997).

When an organization has many stakeholders, it is not always possible to interview each one or to have everyone gathered in one place for a focus group or evaluability assessment meeting. The Delphi method allows groups of stakeholders to be located all over the world, increasing participation and the range of perspectives taken into consideration. A CBO can save money on an evaluation by conducting a Delphi study ahead of time to assist in framing the evaluation. The rationale for this study was to determine the potential and effectiveness for such a method. As with all methodologies, it is expected that the Delphi has both strengths and weaknesses. As Patton (1997) stated, "The strength of the Delphi approach – lack of face-to-face interaction – is also its weakness" (p. 151). The purpose of this study was to demonstrate the potential of both the paper–pencil and the real-time versions of the Delphi for involving stakeholders in the framing of an evaluation.

2. Delphi method

"Project Delphi" was the name given to an Air Force-sponsored Rand Corporation study focused on understanding the use of expert opinion (Dalkey & Helmer, 1963). The objective of the Delphi methodology was to "reduce the negative effects of group interactions" (Gupta & Clarke, 1996, p. 185) and to obtain the most reliable consensus of opinion of a group of experts (Dalkey and Helmer). The Delphi method is named after the ancient Greek oracle at *Delphi*, who offered visions of the future to those who sought advice (Cassino, 1984; Gupta & Clarke, 1996). In its original form, the Delphi method is a long-range forecasting technique that elicits, refines, and draws upon the collective opinion and expertise of a panel of experts (Gupta and Clarke). On a practical level, the Delphi method is an alternative to formal meetings, interviews, or other face-to-face interactions. Unlike meetings where often not everyone can be present, the Delphi method allows all participants to have equal opportunity to be involved with the decision-making process.

2.1. Characteristics of the Delphi method

The Delphi method was developed as a way to overcome negative effects of person-to-person interactive groups, such as the "the tendency of low-status members to 'go along' with the opinions of high-status members in spite of contrary feelings" (Torrance, 1957; Van de Ven, 1974). Other weaknesses felt by face-to-face meetings, such as following a single thought, getting side tracked, and losing sight of the goal of the discussion (Dunnette, Campbell, & Jaastad, 1963), are less problematic for the Delphi method. Four features that eliminate such problems and characterize the Delphi method are: anonymity, iteration, controlled feedback and statistical group response (Rowe, Wright, & Bolger, 1991).

2.1.1. Anonymity

Anonymity is accomplished by using questionnaires, completed in the comfort of group members' own homes or offices. The premise is that individuals can, without influence from other group members, reflect solely on an issue's merits. The anonymity of the Delphi allows all panelists to be removed from pressures encountered in a face-to-face interaction. All ratings and comments are submitted anonymously, therefore, members can change their minds without feeling judged by others in the group (Rowe et al., 1991).

2.1.2. Iteration

The iteration feature begins with the Generative Round where group members are presented with a prompt describing an issue, problem, or topic of the study. Group members, or panelists, generate ideas and comments about the issue or problem from individual brainstorming. The researcher distills those responses and presents them to the panelists in the form of a survey for a second round of input. This process is repeated two more times, for a total of four iterations (Generative Round, Round One, Round Two, and Round Three) (Rowe et al., 1991).

2.1.3. Controlled feedback

Controlled feedback occurs between iterations when the researcher uses qualitative data (e.g. comments, reasons for ratings, etc.) as a form of qualitative feedback. Controlled feedback presented in an organized format allows panelists to read, comment on, and critique all the facets of the issue virtually simultaneously between iterations (Rowe et al., 1991).

2.1.4. Statistical group response

Statistical group response consists of quantitative feedback (e.g. medians and interquartile ranges, or means and standard deviations) based on the numerical ratings of each item. After the final iteration, the ideas and opinions are listed along with the descriptive statistics of the ratings (Rowe et al., 1991).

2.2. Limitations of the Delphi method

Although the Delphi method can help eliminate some negative effects of face-to-face interaction, it still has some limitations including the potential of falling victim to the *band wagon* effect. Dominant personalities can unduly influence the face-to-face group (Chung & Ferris, 1971), thus causing group members to agree with the dominant persons despite contrary feelings. It has been found that, when Delphi panelists are given fictitious or distorted feedback between iterations they conform their ratings according to the false information (Francis, 1977; Scheibe, Skutsch, & Schofer, 1975). However, this potential shortcoming may be balanced by the benefits of a real-time Delphi the goal of which is consensus building. In this case, conforming to group ratings is expected, and can be viewed as the panelists considering the opinions of others and then adjusting their own ratings accordingly as a necessary part of the process of building consensus.

Critics have noted other limitations of the Delphi methodology: potential for sloppy execution, crudely designed questionnaires, poor choice of panelists, unreliable result analysis, limited value of feedback and consensus, and instability of responses among consecutive Delphi rounds (Gupta & Clarke, 1996). However, these limitations are not unique to the Delphi method, as all research methodologies are at risk for sloppy execution, poorly designed questionnaires, and poorly chosen panelists. A further limitation, fatigue, occurs when there are a large number of topics or questions per Delphi topic, or when questions are difficult to understand (Huckfeldt & Judd, 1974). Again, fatigue is an issue for all surveys, no matter the type, if they are long, or difficult to understand.