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The Role of E-Collaboration in Participative Budgeting

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ABSTRACT

The increasing use of collaborative technologies and group support systems in the budgeting process has already begun to affect the procedures and outcomes of that process. Even though sizable bodies of research exist in both group support systems (GSS) and participative budgeting (PB), there is a paucity of evidence on how GSS have impacted the budgeting process and outcomes. The objective of this research is to integrate the extant literatures on GSS and PB into a theoretical model that is then used to empirically examine selected impacts of these technologies. The theoretical model is an adaptation and extension of the Theory of Planned Behavior (Ajzen 1991). A survey will be used to test hypotheses arising from the model.

OVERVIEW

Communication, collaboration, and group support technologies such as web-based chat tools, web-based asynchronous conferencing tools, email, listservs, collaborative writing tools, workflow control systems, and document management applications have already begun to impact decision-making processes and outcomes. While an extensive literature exists concerning the impacts on e-collaboration of computer-mediated communication (CMC) and group support systems (GSS), one type of managerial decision process that has received little attention in the e-collaboration literature is participative budgeting.

Budgeting is an area of continuing interest to managers and scholars because of its important role in communicating goals and constraints, and in motivating and evaluating employees. Participation by subordinates in the budgeting process has been found to have many benefits, including reduced information asymmetry between superiors and subordinates, increased subordinate satisfaction, and higher subordinate motivation. Traditionally, in practice and in research, participation has been assumed to take place in face-to-face meetings between the superior and the subordinate. As in other areas within organizations, group support systems are being deployed in participative budgeting (Smith, Goranson, & Astley, 2003). Unlike some other areas like project management, the role of e-collaboration technologies on participative budgeting has received scant attention. This is unfortunate because the deployment of budgeting GSS is likely to have intended and unintended impacts on both the process and the outcomes of the participative budgeting.

Research has shown that, relative to face-to-face communication, group support systems may have positive effects, negative effects or no effects. In an extensive literature review, Fjermestad (2004) found that the type of task, the GSS and their interaction have significant effects on outcome variables. For example, GSS is better for idea generation tasks, face-to-face is better for achieving consensus, and communication medium does not seem to affect satisfaction.

However, it may not be appropriate to extrapolate prior GSS research findings to the participative budgeting process. Inherent differences

exist between the tasks and variables examined in the GSS literature and those present in budgeting situations. For example, in GSS studies, the group's objective is to accomplish the immediate task at hand. In budgeting, the participation task has both immediate and subsequent objectives. The immediate objectives are the communication of information relevant to performance goals and the setting of those goals. The subsequent objectives are to improve attitudes toward and to motivate performance of a task that will be evaluated using the goals as the benchmark.

The objective of this research is to integrate the extant literatures on GSS and PB into a theoretical model that is then used to empirically examine selected impacts of these technologies. The theoretical model is an adaptation and extension of the Theory of Planned Behavior (Ajzen 1991). A survey will be used to test hypotheses arising from the model.

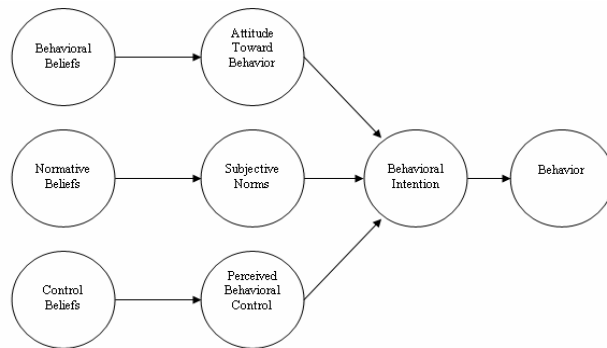
THEORETICAL MODEL

The Theory of Planned Behavior (TPB) is widely accepted as a premise for predicting consciously intended behavior (Ajzen 1991). TPB is an extension of the Theory of Reasoned Action (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975) which relies heavily upon expectancy theory. According to TPB (a simplified model is depicted below), an individual's behavior is guided by the intention to behave and intention is determined by three kinds of attitudes: (i) personal *attitude* toward the behavior, (ii) social expectations or social attitudes concerning the behavior which is referred to as the *subjective norm*, and (iii) the individual's *perceived control* over the behavior. In an effort to explain behavior and not just predict it, TPB also deals with the salient perceptions or beliefs that are the antecedents of these attitudes.

The three types of antecedent salient perceptions or beliefs in TPB correspond to the three kinds of attitudes or influences. Personal *behavioral beliefs* concerning positive and negative attributes of the behavior are assumed to lead to the personal attitude toward the behavior. *Normative beliefs* concerning the likelihood that important, referent individuals approve or disapprove of the behavior. Normative beliefs result in perceived social attitudes, expectations and pressure (the subjective norm). *Control beliefs* deal with the perceived presence or absence of requisite resources and opportunities and with the anticipated obstacles and impediments to performing the behavior. Control beliefs give rise to perceived behavioral control. Thus, these perceptions lead to the attitudes, which are assumed to jointly determine the formation of an individual's behavioral intention, which, in turn, leads to behavior. As a general rule, the more favorable the attitude, the subjective norm, and the greater the degree of perceived control, the stronger the intention to perform the behavior (Ajzen 1991).

This model will be extended to incorporate selected findings from the e-collaboration literature, with emphasis on specific characteristics of

Figure 1. Theory of Planned Behavior



GSS that are currently in use for budgeting in small to mid-size organizations. The model will also be extended to incorporate selected findings from the participative budgeting literature, with emphasis on results concerning organizational and procedural justice. Hypotheses will be developed concerning the impact of the characteristics of GSS and justice on attitudes, norms and control.

The ideal sample population for this research is managers who are involved in the budgeting process. It is our intention to include both managers using budgeting GSS and those not using budgeting GSS, so that we can make comparisons.

To the extent possible, we plan to use questions and metrics from previously validated survey research instruments. To the extent that this is not possible, we will attempt to statistically validate and evaluate metrics used for the extended model.

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