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# ASSESSING THE IMPACT OF DECISION PROCESS ON EFFECTIVENESS OF STRATEGIC IT DECISIONS: A TRIANGULATION APPROACH<sup>1</sup>

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## Extended Abstract

Research on strategic information systems planning (SISP) has been characterized by a heavy emphasis on normative models for IT strategy formulation. Numerous approaches to formulating strategic plans and for designing IT planning systems have been suggested in the literature. Despite this, evidence from empirical studies indicates that IT executives have a great deal of trouble in translating plans into actions and specific decisions. Hence, our knowledge on IT planning needs to be supplemented with an understanding of strategic IT decisions and the processes underlying them.

Strategic IT decisions are those fundamental decisions that shape the IT strategy of an organization. While there has been considerable research on issues pertaining to formulating and implementing IT strategy, research on strategic IT decisions has received relatively limited attention. Addressing this gap, this study focuses on the process and effectiveness of strategic IT decisions. We define strategic IT decision as an IT-related decision whose intended impact is perceived as crucial to the organization. The dynamics of strategic IT decision process are investigated using two constructs, namely *rationality* and *politics*. Rationality in decision making refers to the extent to which the decision process involves gathering of information relevant to the decision and the reliance upon the analysis of this information in making the final choice. Politics are the observable, but covert, actions performed by executives within an organization or by agencies external to the organization in order to influence a decision.

Our study is guided by two key research questions. First, *to what extent does rationality in strategic IT decision process impact the decision effectiveness?* Second, *what impact does political behavior in strategic IT decision process have on the decision effectiveness?*

A triangulated research design with a combination of qualitative and quantitative methods was used in this study. We used qualitative data collected from 67 strategic IT decisions to develop hypotheses relating rationality, politics, and decision effectiveness, constructed a survey instrument, and validated these hypotheses with a survey of 223 strategic IT decisions. The decisions we examined involved development of strategic applications, choice of technical infrastructure, IT-structural arrangements and choices concerning systems delivery including outsourcing.

The research was carried out in two phases: qualitative case research in the first phase, followed by a survey in the second phase. The first phase used case method of research to gather longitudinal data on 67 strategic IT decisions from three large

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<sup>1</sup>The complete text of the paper and the list of references can be obtained from the authors on request (ranga@cba.siu.edu).

organizations. Data on strategic IT decisions was collected through in-depth, semi-structured interviews with 54 executives and through a review of archival data. Analysis of this data yielded a number of indicator variables for our constructs and also threw light on the associations between rationality, politics, and decision effectiveness. The findings from case research suggested a positive association between rationality and decision effectiveness and a negative association between politics and decision effectiveness. Moreover, our case data also suggested co-existence of rationality and politics in a decision process, which is quite different from a conventional view of treating them as mutually exclusive constructs. The associations between decision process and decision effectiveness were formulated as hypotheses for the second phase of the research.

In the second phase of our research, a survey was conducted among senior IT executives to elicit data on strategic IT decisions. The survey instrument was prepared based on literature from reference disciplines as well as from data gathered from case research. The questionnaire was mailed to 1,350 IT executives; 223 usable responses were obtained. Data from these 223 responses were analyzed using structural equation modeling.

The results of statistical analysis validate our earlier findings from case research. The results confirm that IT executives who systematically collected information and analyzed it made more effective decisions than those who did not. The finding also validates the assumption of rationality that is inherent in many SISP models. Our analysis also confirmed a negative association between politics and decision effectiveness. Our findings imply the need for IT managers to rely on comprehensive data collection and analysis, and to contain negative fallout of political behavior in the decision process. Although the pressure to make faster decisions might tempt executives to overlook these simple but powerful activities, it must be remembered that it is precisely these measures that are likely to ensure a sound decision.

One of the key contributions of our research is in terms of its methodological implications. Our study illustrates how qualitative and quantitative methods can be combined to enhance theory development in the MIS area. From a methodological view point, our study highlights three major issues: (1) the complementary nature of qualitative and quantitative approaches, (2) the value of the triangulation approach in understanding IT management processes, and (3) the value of adapting theoretical perspectives from reference disciplines and exploring and validating them in the MIS context.