

Chapter 5.4

Analysis of User Involvement and Participation on the Quality of IS Planning Projects: An Exploratory Study

Varadharajan Sridhar

Management Development Institute, India

Dhruv Nath

Management Development Institute, India

Amit Malik

Management Development Institute, India

ABSTRACT

The process of information systems planning is critically dependent on the users of the system. The involvement and participation of these users and its impact on the effectiveness of IS planning has not been studied in the literature. In this article we address the effect of user involvement and participation on the quality of IS planning projects. This was done through an exploratory quasi-experiment study conducted in an academic setting. We studied the effects of user involvement using two sets of teams doing IS planning exercises, one in which the user was involved as part of the project team and the other where the user

was outside the project team, but was involved in interviews and reviews of project artifacts. We also measured the extent of user participation through a survey of participants engaged in the IS planning projects. Results indicate that user involvement has significant positive effect on user participation, as well as on the quality of IS planning projects. However the effect of user participation on the quality of projects is mixed and needs further research.

INTRODUCTION

During the early days of computerization, several organizations had made major investments in

hardware and software, but ended up with failed implementations. In many of these cases, the reasons for lack of success were not technical, but business related. Topmost among these was the fact that in many cases, there was no link between the business goals and strategies of an organization and the selection of information systems to be developed (McFarlan & Nolan, 1975; McFarlan, Nolan & Norton, 1973; Pyburn, 1983). In other words, an application would be identified not because it would have a major impact on the business strategies of the organization, but possibly because a competitor had implemented it, and the management felt they would be left behind if they did not follow suit. Or, some key manager had seen the application working wonders somewhere else and therefore assumed it would work the same wonders here as well. Quite naturally, even with the most highly skilled development team, such applications were less likely to impact the business strategy of the organization than those that were directly derived from the business strategy, by design. Teo and Yang (2001) pointed out that ignoring business goals or failing to translate these goals and strategies into action plans resulted in major problems during the information system (IS) plan development phase.

Similarly, not much attention was paid to how these applications, once selected, would be prioritized and ultimately sequenced. As a consequence, companies often went ahead and computerized applications that were doomed to fail, for a variety of reasons. For instance, the data they required might not be available. Or they might be dependent on other systems for which computerization had not yet been planned. In many cases, organizations faced political problems and strong opposing vested interests, which prevented certain applications from being successfully implemented.

This alarming failure rate led to the development of the discipline of IS planning (McFarlan & Nolan, 1975; McFarlan et al., 1973; NIIT, 1990). The IS planning has been described as a

managerial process for integrating IS considerations into corporate planning process, linking IS applications to business goals, and determining information requirements necessary for meeting organizations' short- as well as long-term goals (Wang & Tai, 2003). Several researchers and consultants have created various methodologies and processes for IS planning such as IBM's business systems planning, strategy set transformation, critical success factors, business information characterization, portfolio management analysis, information engineering, and end/ means analysis as reported in Wang and Tai (2003). However, all of them have one critical common factor—namely, they all start with the business needs, goals and strategies of the organization, and then proceed to look at IS solutions to support these business needs (McFarlan & Nolan, 1975; Porter & Millar, 1985; Henderson, Rockart, & Sifonis, 1987; Peak, Guynes, & Kroon, 2005).

Despite the use of such methodologies in IS planning, there were many failures in the launching, development, and implementation phases of IS planning process as reported by Teo and Ang (2001). Earlier work by Earl (1993) provided taxonomy for IS planning problems including method, implementation, and process concerns, and pointed out that effective management of these concerns was a necessary condition for successful IS planning. However, Teo and Ang (2001) noted that the IS planning problems were rarely reported in the literature and were discussed only in candid, private conversations between associates engaged in systems work. It is in this context that we study an important IS planning problem that has not gained much attention of researchers.

There are three primary actors in the IS planning exercise. Firstly, the top management, who decide on the business goals and strategies, and also guide the entire process. Secondly, the users, who are middle- to senior-level managers, and who bring in details of critical success factors, information needs, processes in place, and so on. And finally, the consultants, who might be internal

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