Chapter XIV

Important Human Factors for Systems Development Success: A User Focus

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ABSTRACT

Improving user satisfaction with information systems is an important consideration given the amount of resources organizations invest in systems development. Many factors are likely to play a role in enhancing the satisfaction users feel toward their systems, but probably none is as important as having knowledgeable, well-trained users participate in a meaningful way in the system development process. This study empirically tests the importance of user participation, user experience, user/developer
communication, user training, user influence, and user conflict encountered during the system development process. A sample of 228 system users were used for a multivariate regression model testing the importance of these factors. The results indicate that user participation, user training, and user expertise can explain 61% of the variance in user satisfaction with their systems. The other factors showed no statistical significance in this study. Based on the results, managerial recommendations are proposed to people responsible for the systems development process in organizations.

INTRODUCTION

The importance of user participation in systems development as an important ingredient for system success has been studied widely (Hwang & Thorn, 1999; Mahmood, Burn, Gemoets, & Jacquez, 2000; Robey, 1994; Barki & Hartwick, 1994a, 1994b). There are many published reviews of this literature (Ives & Olson, 1984; Pettingell, Marshall, & Remington, 1989; McKeen, Guimaraes, & Wetherbe, 1994; Cavaye, 1995). Additionally, there have been a few studies of contextual factors such as the complexity of the business problem being supported by the system, the complexity of the system being developed, and user training that affects these interrelationships (Lin & Shao, 2000; McKeen et al., 1994).

While researchers’ combined efforts have provided considerable insights into the identification of the more important constructs, and have produced several useful measures for these constructs, much remains to be done. As is to be expected, the development of theory in this area has been evolutionary rather than having progressed by major leaps and bounds. One may expect that finding evidence to corroborate the essential role that users play during development should be a simple matter. Surprisingly, this is not the case. While the majority of research evidence finds user participation/involvement correlated with various measures of system success (Mahmood et al., 2000; Hwang & Thorn, 1999), the literature has often presented conflicting results. Some studies have shown user participation to be positively correlated with system success, negatively correlated with system success, and sometimes non-significantly correlated with system success (Brodbeck, 2001). As mentioned above, other user characteristics beyond mere participation in the system development process have been found to be important factors by various authors. The main objective of this study is to focus on user-related factors,
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