



Chapter XIII

Critical Strategies for Information Systems Development Projects: Perceptions of Developers from the United States and Japan

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ABSTRACT

This study investigated the perceptions of information systems (IS) developers from the United States and Japan with regards to the relative importance of 18 strategies that prior research has indicated are important for the successful implementation of an IS. The results of a principal components analysis revealed that the 18 IS strategies could be reduced to five components: (1) Organizational Integration, (2) Communications, (3) Characteristics of the Project Leader, (4) Characteristics of the Project Team Members, and (5) Project

Development Techniques. The analysis also indicated that there were a significant difference in the perceptions of developers from the U.S. and Japan with respect to the importance of the five components. The developers from the U.S. viewed Communications as the most critical component and Project Leader Characteristics as the least important component. Conversely, developers from Japan perceived the Project Leader as the most crucial component for determining the success of an IS project. Team Member Characteristics was viewed as the least important component by developers from Japan. The results were discussed in terms of cultural differences.

INTRODUCTION

For a number of years, academicians and practitioners have been interested in identifying and assessing the importance of strategies crucial to the success of Information Systems (IS). Numerous studies have been conducted to investigate and identify various implementation strategies that are associated with IS success (Li, 1997; Williams & Ramaprasad, 1996). However, most of the studies investigating success strategies have been conducted in the United States and other countries with a similar culture (Elliot, 1996). With an increasing number of corporations developing and implementing IS applications that cross national boundaries and span diverse cultures, there is an urgent need to determine which IS implementation strategies will be effective in other countries (Harris & Davidson, 1999). In an era of corporate multinationalism and globalization of markets, the knowledge gained from cross-cultural research applicable to IS development can determine the difference between success and failure in the implementation of international IS.

Due to social and cultural differences, the successful IS implementation in a global environment may differ significantly from methods that have proven to be successful in the U.S. (Shore, 1998). It has been demonstrated that national culture is an important variable in many global studies on IS development (Shore & Venkatachalam, 1995). Cultural differences at both national and organizational levels are two of the major factors affecting the transfer of computer technology (Straub, Loch, Evaristo, Karahanna, & Strite, 2002). In order to successfully develop and implement global IS, it has been suggested that management may need to modify their operating procedures to suit the needs of the host organization (Katz & Townsend, 2000). Thus, it is important for IS managers to know if the procedures that are successful in the U.S. will also be effective in other cultures and, if not, how their management style might need to be altered.

Cultural factors are known to be particularly important in the development of global IS when Asian offices are involved (Burnson, 1989). Asian cultures generally differ from the western culture on a number of dimensions (Hofstede, 1991). Thus, it may be especially important for IS managers from the U.S. to be flexible and capable of adopting new managerial approaches when implementing global IS involving Asian countries.

In addition, not only have studies on IS development and implementation strategies been conducted primarily in the U.S., but most of the research has relied on the views of the user for evaluating IS success. Prior studies have used a variety of definitions and measures of success that focus on the users' views, such as user satisfaction, system usage, and perceived benefits (Ballantine et al., 1996; Seddon, 1997). The views of IS developers have generally been neglected in IS research (Kumar & Bjorn-Andersen, 1990). However, IS developers make a series of important decisions associated with the design and implemen-

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