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**Chapter I** 

# End User Computing Research Issues and Trends (1990-2000)

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### ABSTRACT

During the 1980s and into the early 1990s, end user computing (EUC) was reported to be among the key concerns facing managers and organizations. Is EUC still an important topic? This study examines academic research during this period. A research-focused framework is offered to provide a conceptual structure for examining the trends and issues in EUC. This framework is parsimonious and also allows a comprehensive classification of end user computing's three major dimensions: end user, technology, and organization. The study examines every article from five leading information systems (IS) journals (ISR, MISQ, JMIS, I&M, and JEUC) for the 11 years 1990-2000. The results indicate that there has been no diminishing of EUC interest and studies during this time, either overall or in any journal or dimension. A discussion of emerging trends, important themes, and journal differences concludes this examination.

### **INTRODUCTION**

EUC has been evolving since the appearance of mainframe end users in the late 1960s; it was mainstreamed with the introduction of the personal computer more than 20 years ago. As organizations and individuals discovered the

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advantages and capabilities of personal computing technology, new competencies and efficiencies were developed that transformed the workplace. The academic study of EUC grew out of an attempt to provide direction and control to managers, executives, and knowledge workers who persisted in using this new technology.

The importance of EUC was evident early on as academics and practitioners consistently rated it as one of the key areas of concern. In a list of the most important managerial issues, Dickson, Leitheiser, Wetherbe, and Nechis (1984) reported EUC as the second-most important. Brancheau and Wetherbe (1987) placed it at number six. More recently, EUC has been ranked high in a number of different settings and nations. Managers of small businesses ranked training and education of end users as no. 2 and end user support as no. 4 (Riemenschneider & Mykytyn, 2000). U.S. multinational corporations ranked EUC as no. 4 of 32 top issues (Deans, Karwan, Goslar, Ricks, & Toyne, 1990-91), while U.S. public sector organizations ranked it no. 4, with office automation no. 5 (Caudle, Gorr, & Newcomer, 1991). Taiwanese managers ranked communications with end users no. 2 (Yang, 1996), while a similar study in China listed the same issue no. 1 (Wang, 1994).

The importance of EUC, however, is not reflected in other studies. In the last few years, for example, the relative importance of EUC in the workplace has reportedly been diminishing, particularly in the U.S. Niederman, Brancheau, and Wetherbe (1991) reported that facilitating and managing EUC was the no. 18 most important managerial issue. Four years later Brancheau, Janz, and Wetherbe (1996) placed it as no. 16, as did Lee, Trauth, and Farwell (1995) in their study of critical IS activities. Clearly, there are some inconsistencies present regarding EUC's importance.

Part of the reason for these conflicting studies is the lack of concurrence as to what comprises EUC today. It is important to note that there is a distinction between managerial EUC and EUC as used in academic literature. To the manager in the organizational setting, end user computing comprises the functions of planning, managing, and supporting the computer needs of end users. As organizations gain computing experience and expertise, EUC becomes less important as a management issue, as is evident in some of the larger or more technologically advanced organizations (Essex, Magal, & Masteller, 1998; Guimaraes & Igbaria, 1994).

To the IS academic community, however, EUC covers a wide range of themes and research, from investigations into the nature of individual attitudes and behaviors toward IT to organizational strategies for project development. In fact, there is disagreement as to what should be included in such research. In more than 20 years of research in EUC, there is no consensus as to what EUC success means or how organizations should assess their EUC needs (Harris, 2000). Despite this lack of agreement as to what constitutes EUC, a comprehensive examination of relevant EUC research reveals some consistent patterns and

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