Preface

I am pleased to announce that we have broadened the horizon of the *Journal of End User Computing* (JEUC). It is now called the *Journal of Organizational and End User Computing* (JOEUC). As editor of JEUC, I have always favored a very broad definition of end user computing. I have always felt that end users are involved in one way or another in all information systems that we design, develop, and implement. Since information systems are designed for organizations to address some problems or take advantage of some opportunities and since all organizational systems are designed with end users in mind, it makes sense for us to combine the organizational and end user computing areas. The manuscripts published in this book already reflect that change of focus.

The present scholarly book is a collection of some of the best manuscripts published in JOEUC during last year. This introduction is mostly a collection of abstracts provided by the authors for their manuscripts. The book is divided into three sections: Section I covers e-commerce processes and practices. It includes nine manuscripts. Chapter I by Gefen starts the section by investigating whether habit becomes a major factor in addition to behavioral intentions to use a new IT after the continued use of the IT among experienced users. The author examines this question in the context of experienced online shoppers. The data show that, as hypothesized, online shoppers intentions to continue using a website that they last bought from depend not only on PU and PEOU but also on habit. Moreover, the explained variance indicates that habit may also be a major predictor of PU and PEOU among experienced shoppers.

Chapter II is penned by Wang and Tang. They address the measurement of customer perceptions of website service quality in digital marketing environments. They argue that the current SERVQUAL and IS-SERVQUAL instruments need to be refined and validated to fit the digital marketing environment as they are targeted primarily toward either traditional retailing or information systems contexts. They suggest that an EC-SERVQUAL instrument with good reliability and validity will be essential to the development and testing of e-business theories, and provide researchers with a common framework for explaining, justifying, and comparing difference across results. They validate and refine a comprehensive model and in-

strument for measuring customer perceived service quality of websites that market digital products and services.

In Chapter III, Golden, Hughes, and Gallagher use a descriptive study to identify some of the factors that contribute to the successful use of e-business in Ireland. They have found that specific organizational factors such as early adoption of web technology, internal information technology expertise, having an e-business strategy and a person who champions the e-business project result in more successful e-business websites. Interestingly, they have found no evidence to support the belief that certain product types are more likely to be successful on the web than others.

Leonard and Cronan are the authors of Chapter IV. They argue that supply chain management (SCM) is an application of electronic commerce (EC), and therefore, the impact of EC can be seen throughout the supply chain (SC). Their study explores the effectiveness of replenishment using the Internet (i.e., website retailing) when comparing different replenishment options, by analyzing the distributor-retail outlet and retail outlet-customer links in the SC. They also study customer buying habits as well as inventory management strategies when products are purchased via a website. They analyze 515 products over time (monthly) to identify replenishment issues that are relevant to conducting business (e-business) from a website (eTailing).

In Chapter V, Saeed, Hwang, and Yi provide a comprehensive review of the extant information systems (IS) literature related to online consumer behavior and integrate the literature, in order to enhance knowledge of consumer behavior in electronic markets. They have grouped 42 studies published in major IS journals into three categories of Web use, online purchase, and post-purchase behavior, and describe important predictors identified by those studies for each category. They have also conducted a meta-analysis to quantify the interrelationships between the study variables that appeared multiple times across studies. In their chapter, they introduce a framework, which integrates research findings across studies to develop a coherent and comprehensive picture of the online consumer behavior research conducted in the IS field.

Hodkinson and Kiel are the authors of Chapter VI. They develop a model of consumer Web search behavior that is derived from consumer external information search behavior models and also those relating to search behavior in physical and hypertext environments. They also discuss personal demographic and behavioral variables, which have been found to affect search behavior in conventional consumer information environments. They propose a taxonomy of Web search actions as the basis for recording Web search behavior. They also discuss the outcomes of information search behavior from decision-making and affective viewpoints. The variables discussed are then combined into a proposed model of Web search behavior.

In Chapter VII, Lueg, Moore, and Warkentin present a set of hypotheses and an explanatory model concerning Web-based information search behavior to help us understand how consumers search for and benefit from information derived from the Internet. The authors test their model within the patient health domain, wherein consumers are often highly motivated to seek relevant information. Their analysis

suggests that there is a clear link between an individual's health and his or her use of online health information. They have found that the search intensity that individuals undertake results in an increased propensity to talk with health care providers about the information. They generalize, based on this limited experience, that the higher the consumer's involvement with the decision, the higher the motivation to seek information online.

In Chapter VIII, Dai and Grundy have done an empirical assessment of micro-payment and macro-payment purchasing models for an online newspaper application. They report on the design of their experiment, the two kinds of micro-payment (client and server-side e-wallets) used, and customer feedback. In their study, they carried out an assessment of customer effort and economic trade-off when using these services and compare the results of this assessment to a survey of customers using each system. Based on their research, they present directions for further online payment research aiming to improve the overall satisfaction and efficiency of payment models for end-users.

In Chapter IX, the final chapter in this section, Gammack and Hodkinson find that interactivity is a critical end-user issue for consumers purchasing online. According to the authors, levels of user interactivity up to and including virtual reality environments are now realistic in e-tailing. Preliminary studies conducted by the authors across a range of businesses and products indicated that consumers are willing to purchase hedonic products online, but many businesses imposed a high workload on online purchasers. Despite successful web marketing of hedonic products (e.g., CDs), they find that no contemporary providers of customized surfboards offered finished product e-tailing, nor used virtual reality technology to demonstrate performance. The authors undertook a real case study of online swimwear purchase that demonstrated an improved purchase process. "Beachtown", a virtual reality e-tailing environment related to a coastal tourism economy allowed them to further examine apparel, surfboard and holiday purchases. The authors' results indicate that an enhanced interactive virtual environment increases end user involvement and willingness to purchase.

Section II addresses end user commitment, dissatisfaction, and system's failure. In Chapter X, Stone and Henry begin the section by putting forth a theoretical model that links several antecedents (e.g., past computer experience of the end-user, computer staff support for the computer system, ease of system use, and the degree of system use) to the end-users' organizational commitment, mediated by computer self-efficacy and outcome expectancy. They validate the model by using data collected by a survey of computer-based medical information system end-users in a large hospital in the southeastern United States. Their empirical results indicate that past computer experience and the degree of system use positively influence the end-user's organizational commitment through both computer self-efficacy and outcome expectancy. The results also show that computer staff support and ease of system use positively impact the end-user' organizational commitment through outcome expectancy.

The second chapter in this section, Chapter XI, is written by Shaw, Lee-Partridge, and Ang. They contend that relying on user satisfaction surveys alone will not provide a complete picture of the end-user environment in an organization. They suggest that it is necessary to look beyond the end-user satisfaction surveys to tease out hidden areas of dissatisfaction. In their study, they examine the different views and perspectives of individuals in an organization toward end-user computing (EUC) and EUC support and how those views can affect end-user satisfaction. They suggest that service-quality gap analysis can be used to identify specific support areas that need attention, as well as identify which particular support areas influence overall end-user satisfaction. However, they warn practitioners that the end-user population is not a homogeneous population that can be served with a one-size-fits-all support strategy. According to the authors, the identification of technological frames of reference and their effect on end-user satisfaction is crucial to a deeper understanding of satisfaction.

Xu and Roberts suggest that the supermarket sector is at the forefront of B2C development in Chapter XII. They contend that e-retailing for grocery shopping (e.g., Webvan) particularly in the US, has not been successful. By using a case study and a questionnaire survey, the authors report the Internet shopping models adopted by major UK supermarkets, and examine consumer shopping behavior and their attitudes toward the Internet for grocery shopping.

In Chapter XIII, Sahraoui brings the section to a conclusion by postulating that an empowered workforce can rally the organization to the objective of achieving IT planning effectiveness within the premises of a planning culture geared to empowerment. The author contends that the planning culture is a powerful lever to empower knowledge workers and establish a learning environment conducive to planning effectiveness. He uses a sample of 101 IT professionals to investigate the indirect effects of the planning culture on IT planning effectiveness through the empowerment of knowledge workers. He finds strong support for the three hypotheses of the study, namely: (1) empowered knowledge workers make a significant impact on the quality of planning outcomes; (2) planning cultures empower knowledge workers; hence, (3) improving the quality of planning through the motivational path of knowledge workers empowerment.

The third and final section of the book discusses end user performance, productivity, and training. In Chapter XIV, Sears and Jacko report on research of the effects of hardware performance, application design, and cognitive demands on user productivity and perceptions. They focus on clerical tasks typical of those activities that many lower level organization workers encounter. They accomplish this by engaging 175 representative participants in a field-based experiment. Participants worked one eight-hour shift and completed a variety of realistic tasks involving the creation and modification of documents using Microsoft® Word, Excel, and PowerPoint®. Motivation was ensured through the use of a quantity/quality-based financial incentive. The authors' analysis of both task-completion times and error rates revealed significant effects for cognitive demands, with more demanding tasks resulting in longer task completion times and higher error rates. They find that

under the right circumstances, providing individuals with a more powerful computing platform can lead to an increase in productivity. They claim that their results provide strong support for the importance of navigational activities even when the users' primary goal is not navigation.

In Chapter XV, Wierschem and Brodnax claim that some managers have questioned the necessity of continuously upgrading computing technology when its efficient use is dictated more by the speed of the user than by the speed of the processor. They also claim that these observations have led to the questioning of the value that continued processor speed upgrades add to end-user productivity. The authors claim that they have identified the impact that upgrades in processing speeds of personal computers have on end-user productivity. In their study, they conduct a controlled lab experiment to measure the impact that processor speed had on student output. Based on the results of the experiment, they conclude that end-user productivity (as measured by an increase in the amount of work completed) improved.

Kruck, Maher, and Barkhi have the distinction penning the last chapter in the book. They contend that cognitive skills play a critical role in how individuals perform their tasks in today's knowledge-based economy. They claim mainly based on prior research that employers have identified competent spreadsheet skills as one of the most beneficial fundamental computer literacy skills a worker can possess following word processing skills. They also claim that it has been well documented that spreadsheet models developed by end-users contain surprisingly high error rates and that spreadsheet errors can have a dramatic effect on the performance and decision process of end-users. The authors have developed a framework and report the results of empirical tests that suggest spreadsheet training will influence four cognitive skills: namely logical reasoning, spatial visualization ability, mnemonic skill, and sequencing ability; and that these cognitive skills will influence the errors in spreadsheet models.