Preface

This book is the second in the Series in Managing the Human Side of Information Technology sponsored by Idea Group Publishing. This Series was created to address the influence of information technology (IT) in modern organizations and its effect on individuals, focusing on managing the human side of this technology for competitive advantage and organizational prosperity. As the co-editors of the first Series book, *Managing the Human Side of Information Technology: Challenges and Solutions*, noted:

> Organizations must understand that there are a vast number of information resources, particularly human resources, while recognizing the potential of [IT] in support of managerial activities. The days of identifying computer-based information systems as only a collection of hardware and software are gone. In order to be able to achieve greater utilization of this technology, there must be much more emphasis given to the value of individuals who handle and use information resources (Szewczak & Khosrowpour, p. i).

Technologies continue to change and evolve at a rapid pace. The dazzling growth of the Internet as a provider of a host of information resources is perhaps the most significant example of this technological change and evolution. How this technology has impacted people and how people have responded to it in turn have provided students of the human side of IT a fertile ground for study and research.

The chapters of this book are organized into parts that correspond to four broad categories of interest: 1) leadership, risk, spirit and IT; 2) organizational communication and IT; 3) organizational groups and IT; and 4) culture and IT.

Within the leadership, risk and IT category (Part I), Walter O. Einstein and John H. Humphreys present a new leader behavior model in "The Changing Face of Leadership: The Influence of Information Technology." This new model is needed in light of the degree to which emerging instances of IT have changed both the organizational context and the traditional leader-follower power relationship. When used with effective diagnosis, the new model provides guidance to leaders in situations where they have power, as well as situations where power is lacking.

In "The Social Antecedents of Business Process Planning Effectiveness," Sofiane Sahraoui departs from earlier studies that view the organization as made up of distinct IT and business functions. Instead the organization is viewed holistically, i.e., information systems form the skeleton of business processes, and business processes cannot be disentangled from information systems. A model of business process planning effectiveness is presented that identifies information-enabled

leadership, planning culture, knowledge worker management and strategic alignment as key social antecedents.

Various human side risk factors must be considered if IT is to be used successfully to restructure more traditional jobs at the operational and managerial levels of organizations. In "Assessing the Risks of IT-Enabled Jobs," Laura Lally appeals to Normal Accident Theory and the Theory of High Reliability Organizations to examine the issues related to reengineering jobs with IT. Key questions are raised that must be answered if managerial jobs are to be designed that will be more efficient and realistic for a given organizational environment: Are the demands of the new job realistic for the organization's workforce? Do the new jobs consider the issues of separation of duties and redundancy? Do the new jobs require greater degrees of autonomy and responsibility?

Huub J.M. Ruël offers an interesting look at the human side of office IT in the broadest sense in "The Non-Technical Side of Office Technology: Managing the Clarity of the Spirit and the Appropriation of Office Technology." He argues that the management of office IT projects would be more effective if systems developers were more focused on the concepts of spirit and appropriation as developed in Adaptive Structuration Theory, which starts from the assumption that the effects of advanced IT are not a function of the technology itself but of the way the IT is used. His study has implications for changes in internal organizational environment as well as job design characteristics.

Within the organizational communication and IT category (Part II), Dianne Willis examines "Computer Mediated Communication – The Power of Email as a Driver for Changing the Communication Paradigm." Using her own institution as the focus, Willis reports on a survey of people's feelings about the use of email and how they see future patterns of communication developing within the institution. The issues of overload and of alternate forms of communication are examined and discussed.

The Internet is a technology that is used to communicate vast quantities of data and information throughout the world. In the chapter, "Personal Information Privacy and the Internet: Issues, Challenges and Solutions," Edward J. Szewczak looks at the technological, social and legal dimensions of the personal information privacy issue and the problems that the Internet presents to those who value their personal privacy.

Knowledge communication is the focus of "E-communication of Interdepartmental Knowledge: An Action Research Study of Process Improvement Groups" by Ned Kock and Robert J. McQueen. The authors report on an action research project whose results suggest that email conferencing support has a positive impact on knowledge dissemination in organizations when combined with a group methodology (here, MetaProi) for process improvement. One of the main effects was an increase or decrease in individual learning in process improvement groups, depending on the complexity of the issues being discussed and the clarity of electronic contributions by group members.

The Jet Propulsion Laboratory (JPL) at the California Institute of Technology is the site at which research was conducted by Olivia Ernst Neece on the topics of organizational learning and knowledge management. In "A Strategic Systems Perspective of Organizational Learning: Development of a Process Model Linking Theory and Practice," she details how the process model enabled the growth and development of organizational learning at JPL and helped provide the basis for future creative efforts.

Within the organizational groups and IT category (Part III), two chapters by Pak Yoong and Brent Gallupe focus on group support systems (GSS). The first focuses on "reflective practice" to facilitate face-to-face electronic meetings. The authors propose a model of active reflection, which is the attribute of having insight and of giving meaning to data, among other things. The second chapter describes the use of "action learning" to facilitate GSS training. Action learning is a group learning and problem-solving process wherein group members work on real issues and problems with an emphasis on self-development and learning by doing. One of the main emphases for these ideas is to improve the adoption rate of technologies that support electronic face-to-face meetings in organizations.

The third chapter in this part by Thekla Rura-Polley and Ellen Baker considers remote innovation, i.e., innovation organized through electronic collaboration. In "Extending Collaboration Support Systems: Making Sense in Remote Innovation," the authors look at the importance of sensemaking in collaborations with the support of computer-based support tools. They describe a Web-based system called LiveNet that provides members with various tools to effectively accomplish innovation across regions and industries, and consider how this technology can promote the building of relationships among participants.

Within the culture and IT category (Part IV), Andrew Targowski and Ali Metwalli present "The Framework for a Cross-Cultural Communication Process, Efficiency, and Cost in the Global Economy." The framework is intended to produce successful communication among different cultures from different civilizations, thereby promoting global peace through trade. Their research method is based on the quantitative analysis of a cross-cultural communication process and system rather than the more usual qualitative analysis.

Robert W. Gerulat brings a fresh perspective to the issue of outsourcing in the chapter on "Cultural Characteristics of IT Professionals: An Ethnographic Perspective." Drawing on the discipline of anthropology, he considers two underlying research questions: 1) What are the common cultural norms, values, beliefs, and assumptions that describe the culture of IT professionals? and 2) How are cultural norms, values, and beliefs transmitted to and reinforced by the IT community? His study points to important differences between IT professionals who are managerially oriented and those who are technically oriented.